In the

SUPREME COURT OF THE UNITED STATES

October Term, 1957

Nos. 16 and 18

BROTHERHOOD OF LOCOMOTIVE FIREMEN AND ENGINEMEN, BROTHERHOOD OF RAILROAD TRAINMEN, ORDER OF RAILWAY CONDUCTORS AND BRAKEMEN, and SWITCHMEN'S UNION OF NORTH AMERICA,

Intervenor-Appellants,

and

ROBERT N. HARDIN, Prosecuting Attorney for the Seventh Judicial Circuit of Arkansas, and W. F. DENMAN, JR., Prosecuting Attorney for the Eighth Judicial Circuit of Arkansas,

Appellants,

—v.—

CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD COMPANY, THE KANSAS CITY SOUTHERN RAILWAY COMPANY, MISSOURI PACIFIC RAILROAD COMPANY, ST. LOUIS-SAN FRANCISCO RAILWAY COMPANY, ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, and THE TEXAS AND PACIFIC RAILWAY COMPANY,

Appellees.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF ARKANSAS

MOTION TO AFFIRM

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IN THE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1967

Nos. 950 and 973

BROTHERHOOD OF LOCOMOTIVE FIREMEN AND ENGINEMEN, BROTHERHOOD OF RAILROAD TRAINMEN, ORDER OF RAILWAY CONDUCTORS AND BRAKEMEN, and SWITCHMEN'S UNION OF NORTH AMERICA,

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Appellees move, pursuant to Rule 16 of the Revised Rules of this Court, that the judgment of the District Court be affirmed on the ground that the decision below (274 F.Supp. 294) is so clearly correct that plenary review by this Court is not warranted.

QUESTIONS PRESENTED.

The basic question presented by this appeal is whether the District Court erred in finding and concluding that

(1) pervading and fundamental changes in railroad technology, equipment, and operating practices since the 1920s deprive the prior decisions involving the Arkansas crew consist statutes of controlling force or effect;

(2) "under present conditions continued enforcement of the statutes makes no significant contribution to railroad safety"; and

(3) "the statutes as they operate today are unreasonable and oppressive" in violation of the Due Process and Commerce Clauses of the United States Constitution.

The findings and conclusions of the District Court are precisely and unequivocally addressed to the basic issues raised by the pleadings. Nothing on these constitutional issues is left undecided and there can be no doubt about the manner in which the issues have been resolved. If the District Court's comprehensive findings of fact are supported by the record, it is clear that no substantial legal issues are presented. The propriety of reappraising the validity of the Arkansas crew consist requirements since "great changes and improvements in railroad equipment and operating methods have been made, which changes and improvements have contributed largely to safety of operations" would appear to be beyond dispute (274 F.Supp. at 301). Neither can there be any serious doubt about the invalidity of statutes, purportedly based on safety considerations, whose "continued enforcement makes no significant contribution to railroad safety," which impose "unreasonable and arbitrary requirements," and which are "functus officio as far as railroad safety is

concerned" (274 F.Supp. at 303-05). This Court in fact settled the applicable legal principles when it rejected the Brotherhood's claim that these constitutional challenges raised by the carriers were insubstantial (*Brotherhood of Locomotive Engineers, et al.* v. *Chicago, R. I. & P. Co., et al.*, 382 U.S. 423 (1966)). Although this Court at that stage of the litigation was passing primarily on the legal adequacy of the pleadings, its decision is also controlling here since the findings of the District Court clearly support the basic allegations of the complaint.

It is thus apparent that the review which appellants seek in this Court is primarily concerned with factual issues. However, the record fully supports the findings of the District Court and there are thus no issues worthy of plenary review by this Court.

STATEMENT.

This suit was filed by the six interstate railroads operating in and through the State of Arkansas for the purpose of seeking a determination that the 1907 and 1913 Arkansas statutes requiring crews of six employees[1] in freight and yard service were in conflict with the provisions of the Due Process, Equal Protection and Commerce Clauses of the United States Constitution. It was also alleged that the statutes in question were in conflict with Public Law 88-108 (77 STAT. 132) and various awards rendered pursuant thereto and that the Federal

[1] The Arkansas freight and switch crew laws historically have been the most burdensome legislation of this type adopted by any state. The only other remaining state legislation effectively regulating railroad crew consists is the Indiana requirement of six men on longer trains (but not on switch crews); the New York requirement of a fireman on certain operations; the Wisconsin requirement of five men in certain operations (held partially unconstitutional in *Chicago & North Western R. Co.* v. *La Follette*, Circuit Court of Dane County, Wisconsin, September 7, 1967); and the Ohio requirement of five men on some train operations and four on others.

legislation had thus preempted the field. Originally the defendants were two prosecuting attorneys of the State of Arkansas charged with the enforcement of the statutes and injunctive relief was sought to restrain the defendants from enforcing the laws in question. Shortly after the suit was instituted, the national labor organizations representing operating employees of the railroads were permitted to intervene. Following the denial of certain motions filed by the intervenors, the District Court, one judge dissenting, granted the carriers' motion for summary judgment based on the preemption point raised in the complaint. This Court reversed and held, one Justice dissenting, that Congress had not intended to supersede the Arkansas statutes when it enacted Public Law 88-108 and the other relevant legislation. *Brotherhood of Locomotive Engineers, et al.* v. *Chicago, Rock Island and Pacific R. Co., et al.*, 382 U.S. 423 (1966).

On the appeal to this Court the appellants contended, as they had in the District Court, that the constitutional questions raised by the complaint were so insubstantial as to defeat the jurisdiction of the three-judge court. Rejecting this contention, this Court held:

> "The complaint here, however, also challenged the Arkansas statutes as being in violation of the Commerce, Due Process, and Equal Protection Clauses. In briefs submitted to us after oral argument the appellants have argued that all these constitutional challenges are so insubstantial as a matter of law that they are insufficient to make this an appropriate case for a three-judge court. We cannot accept that argument. Whatever the ultimate holdings on the questions may be we cannot dismiss them as insubstantial on their face" (p. 428).

The case was remanded to the lower court "* * * for consideration of the constitutional issues left undecided by its previous judgment" 382 U. S. 423, 438.

On remand, the parties agreed to certain expediting procedures which permitted the compilation of a complete and extensive record with a minimum number of trial days. The record contains the testimony of over 100 witnesses plus many exhibits and various public reports and documents. Although the record is necessarily massive, the 3-judge District Court recognized that the issues it was to decide were largely factual and elected to hear them first-hand. Thus, the Court did not follow the example of *Norwood* by appointing a special master.

The State of Arkansas made only a minimum presentation, explaining its evidentiary showing as follows:

> "In the course of preparing evidence to be submitted during the trial, defendants did not solicit testimony to the conclusion that the minimum crews established by the Arkansas Statutes enhance the safe operation of railroad transportation. The task of sustaining the validity of the statutes was left to the intervening Railroad Brotherhoods" (Post-Trial Brief for Defendants, pp. 2-3).

Not all of the "intervening Railroad Brotherhoods" undertook the task of sustaining the statutes in question. Although the Brotherhood of Locomotive Engineers, the Order of Railway Conductors, and the Switchmen's Union of North America joined in the Motion to Intervene, these organizations did not call any witnesses to support the statutory requirements. The witnesses who were called were members instead of the labor organizations representing firemen and brakemen. Since conductors and engineers are the senior members of the crews operating trains in freight and yard service, and would continue as members of such crews in the absence of the statutory requirements, the silence of the organizations representing such employees is difficult to understand if the statutes in question make any contribution to safety of

operations.[1] The organizations representing firemen and brakemen (the unnecessary and dispensable crew members under the decision of the lower court) did call a number of witnesses, primarily for the purpose of eliciting opinion testimony.

The case was fully litigated, argued and briefed and was decided by the District Court after being under advisement for several months. The decision of the lower court was unanimous and deals clearly and most directly with the issues raised by the pleadings. The extensive proof which was analyzed and discussed by the District Court related primarily to the changes in railroad technology, equipment and operations which had occurred since the prior decisions by this Court in the early 1900s and the further issue as to whether the statutes in question, considered in the context of current railroad operations, bear any relationship to the safety of such operations. With respect to this latter issue the District Court found:

> "Conceding that as late as the Norwood decision the question of the reasonableness of the Arkansas full crew laws was 'fairly debatable,' we are convinced with the requisite degree of certainty that the question is not fairly debatable today, and it is not made so by the fact that the Brotherhoods continue to debate it.
>
> "We find from the evidence as a whole that under present conditions continued enforcement of the statutes makes no significant contribution to railroad

[1] Other evidence shows that the Brotherhood of Locomotive Engineers has concluded, on the basis of experience with operations conducted without firemen under the Award of Arbitration Board No. 282, that firemen are redundant and that an engine crew of two employees (engineer and brakeman) is entirely safe and adequate (PX 79, p. 19). Furthermore, the Brotherhood of Locomotive Engineers concedes the correctness of the judgment of the District Court and has declined to join in this appeal (see Letter of Counsel for Appellants to Honorable John F. Davis, dated October 30, 1967).

safety, and that the statutes as they operate today are unreasonable and oppressive, and that they violate the Due Process Clause and unconstitutionally burden interstate commerce" (274 F.Supp. at 303).

The *Norwood* decision to which the District Court referred was the last of a series of three decisions dealing with the validity of the Arkansas Statutes enacted in 1907 and 1913. In the first of these decisions, *Chicago, Rock Island and Pacific Railway Co.* v. *State of Arkansas,* 219 U.S. 453 (1911), this Court affirmed a determination by the Supreme Court of Arkansas holding that the Arkansas statute requiring a six-man crew in freight service was not "so unreasonable as to justify the court in adjudging that it is merely an arbitrary exercise of power and not germane to the objects which evidently the state legislature had in view." In the second of these decisions this Court affirmed a holding by the Arkansas Supreme Court with respect to the statute requiring a six-man crew in yard service. *St. Louis, Iron Mountain & Southern Railway Co.* v. *State of Arkansas,* 240 U.S. 518 (1916). The Arkansas court had held that it could not say "that the legislature had no grounds for adopting this requirement." *St. Louis, Iron Mountain & Southern Railway Co.* v. *State,* 114 Ark. 486, 170 S. W. 580 (1914).

Both of the suits referred to above were filed shortly after the statutes in question were enacted. In a subsequent suit culminating in *Missouri Pacific R. Co.* v. *Norwood,* 13 F.Supp. 24 (1933), it was asserted that the statutes had become repugnant to the United States Constitution because of changed circumstances since the prior decisions of this Court. This Court defined the constitutional issues presented (283 U.S. 249) and amended its mandate to permit trial on those issues (283 U.S. 809). The three-judge court referred the case to a master and on the evidence so taken found that there was insufficient change in conditions to demonstrate that the acts had be-

come unconstitutional. The decision was affirmed by this Court in a per curiam order, reciting as follows: "The Court sees no reason to disagree with the determinations of fact reached by the District Court. The decree is affirmed" (290 U.S. 600 (1933)).

When the present complaint was filed, over 30 years had elapsed since the last of the prior decisions upholding the statutes in question. As the record in the *Norwood* case shows, the evidence introduced in the last of these prior cases was concerned largely with developments before 1930. Consequently, the changes which had occurred and upon which the carriers relied in the present case covered the period from 1930 to 1967, a time span of almost 40 years. The parties introduced evidence with respect to developments during this period of time and much attention was focused on the operating changes produced by the technological and related developments upon which the parties relied. As the following discussion will show, the District Court correctly found and concluded that these developments rendered obsolete the prior determinations regarding the relationship, if any, between the crew size requirements of the Arkansas Statutes and the safety of railroad operations. Considering the matter in the context of current operations, the Court concluded that there was no reasonable or debatable basis upon which the statutes could be defended and that they had become "functus officio as far as railroad safety is concerned" (274 F.Supp. 305).

I THE DISTRICT COURT CORRECTLY HELD THAT IN VIEW OF SUBSEQUENT CHANGES PRIOR DECISIONS CONCERNING THE ARKANSAS CREW CONSIST STATUTES ARE OBSOLETE PRECEDENTS WITH RESPECT TO THE PRESENT VALIDITY OF SUCH STATUTES.

Initially, the District Court was confronted with the question of the weight to be accorded the prior decisions involving the Arkansas crew consist statutes. After a

careful consideration of the conflicting arguments on this point, the Court concluded as follows:

> "While we consider the issues against the backdrop of the former cases, we must consider them in the light of present day conditions and in the light of the additional experience with and insights into crew consists in relation to safety of operations which have been gained in the thirty-four years which have elapsed since *Norwood* was finally decided" (274 F. Supp. 298).

This approach, we submit, is eminently correct, and does not present any substantial questions on this appeal.

A. The Controlling Authorities Clearly Support Re-examination of the Arkansas Statutes in the Light of Changed Conditions.

This Court has repeatedly held that a statute valid at one time may become unconstitutional by reason of the changed circumstances upon which it operates.

Perhaps the leading case on this point is *Nashville C. & St. L. Ry. v. Walters*, 294 U.S. 405 (1935), where this Court reversed a decision of the Supreme Court of Tennessee which had refused to consider changed conditions in passing on the validity of a statute relating to assessments for the cost of highway construction. This Court stated the governing principle as follows:

> "The Supreme Court declined to consider the special facts relied upon as showing that the order, and the statute as applied, were arbitrary and unreasonable; and did not pass upon the question whether the evidence sustained those findings. It held that the statute was, upon its face, constitutional; that when it was passed the state had, in the exercise of its police power, authority to impose upon railroads one-half of the cost of eliminating existing or future grade crossings; and that the court could not 'any more'

consider 'whether the provisions of the act in question have been rendered burdensome or unreasonable by changed economic and transportation conditions,' than it 'could consider changed mental attitudes to determine the constitutionality or enforceability of a statute.' *A rule to the contrary is settled by the decisions of this Court. A statute valid as to one set of facts may be invalid as to another. A statute valid when enacted may become invalid by change in the conditions to which it applied.* The police power is subject to the constitutional limitation that it may not be exerted arbitrarily or unreasonably. * * *'" (Emphasis added.)

This Court's holding in *Missouri Pacific Railroad Co.* v. *Norwood,* 283 U.S. 249, modified, 283 U.S. 809, (1931) also supports reappraisal of the validity of the Arkansas statutes in the light of changed conditions. In that case, this Court, in spite of having upheld these statutes in 1911 and 1916, remanded for trial on the basis of allegations of changes in railroad operations and technology.

Moreover, the decision of this Court on the preemption issue is also a most precise authority for the proposition that changed conditions warrant a reexamination of the relationship between the requirements of the Arkansas statutes and the safety of railroad operations. The claim that the prior decisions relating to the Arkansas statutes precluded further consideration of their constitutionality was raised by the Brotherhoods in a brief filed after argument in this Court. The Brotherhoods urged at that time, as they do now, that the alleged changes did not justify reexamination of the statutes under the constitutional provisions relied upon by the carriers. This Court, however, rejected the contentions of the Brotherhoods and remanded the case to the District Court for a trial on the merits (382 U.S. 423). In effect this Court held that the allegations of the complaint if sustained by adequate

proof would justify the relief sought by the carriers. It obviously would have been unnecessary to remand the case to the District Court for a hearing and a decision on the merits if the prior decisions precluded the type of judgment entered by the lower court. It follows, therefore, that the law of the case as fixed by this Court at the time of the prior appeal, as well as other decisions relating to the same matter, clearly support the reexamination of the statutes which the lower court undertook in the present case. No substantial question is presented on this appeal by reason of that approach by the District Court.

B. The Changes Upon Which the District Court Relied, as Established by the Overwhelming Evidence, Fully Vitiate Any Relationship Between the Requirements of the Arkansas Statutes and Safety of Railroad Operations Which May Have Existed at the Time of the Prior Decisions.

Properly evaluated, the evidence of changes in railroad technology, equipment and operations since the late 1920s completely destroys any relationship which might have existed at the time of the *Norwood* decision between safety of operations and the Arkansas crew requirements. The District Court referred to this evidence when it concluded that "There is no question that since the *Norwood* decision great changes and improvements in railroad equipment and operating methods have been made, which changes and improvements have contributed largely to safety of operations" (274 F.Supp. at p. 298).

Referring to specific detail in support of its general conclusion, the Court found as follows:

> "The diesel locomotive has entirely displaced steam power, and the design and appearance of a diesel locomotive differ greatly from those of a steam locomotive. A diesel locomotive is a much more efficient piece of machinery than a steam locomotive, and is so designed and arranged as to require much less

human effort in servicing the locomotive and making adjustments while the train is in motion. Almost all necessary adjustments that can be made while the locomotive is in operation are made by manipulating switches and buttons.

"There have been great improvements in cars, couplers, brakes, tracks, roadbeds, and switches. There have been new and improved signals and traffic control devices designed and installed. Communications from one end of a freight train to the other and from the train to points outside the train have been revolutionized by the development of the two-way radio telephone. There are others which might be mentioned. Operating methods have changed also so that the duties of crew members are less arduous than they were thirty years ago" (274 F. Supp. at 301).

The evidence clearly establishes the magnitude of the changes thus referred to by the Court and the effect of such changes on safety of operations and crew size requirements in freight and yard service.

Perhaps the most dramatic of these changes involves the advent of the diesel locomotive, its development over a period of time, and its complete substitution for steam power. The contrast between steam and diesel locomotives, in terms of mechanical reliability, flexibility of power to meet differing requirements, safety for the engine crew, and the complete elimination of the traditional functions of firemen are elaborately detailed in the record (PXs 22, 23 and 24).[1] There is also complete proof

[1] "T." refers to the typewritten transcript of proceedings in the district court. The exhibits were designated as follows:

PX —Plaintiffs' Exhibit
PRX—Plaintiffs' Rebuttal Exhibit
DX —Defendants' Exhibit
IX —Intervenors' Exhibit
IRX—Intervenors' Rebuttal Exhibit

on the safety and efficiency features inherent in the diesel which have had a significant impact on the work of the remainder of the crew. One of the primary ways in which the diesel has thus affected other members of the crew is through its ability to generate great tractive power (PX 22, pp. 39, 70-73). Since the principal problem in the freight operations is to initiate the movement of the train, this feature of the diesels simplifies such operations, lessens the likelihood of train separations, eliminates the need for breaking the train in two over-steep grades and permits more accurate control of switching (PX 22, pp. 39, 70-73). The substitution of diesel for steam power has also eliminated stops for water and fuel, extreme heat, fire blindness, poor visibility due to smoke, cinders and steam, and many other obstacles to safe operations (PX 22, pp. 52-59; PX 23, pp. 20-21).

Derailments from equipment or track failures have been virtually eliminated (PX 26, pp. 15-16, T. 100-01). Breakdowns from hot boxes, broken truck frames and dragging equipment—commonplace in prior years—are now extremely rare (T. 67-8; PX 82, Interrogatories 141 and 142). These equipment failures have been averted by improving the lubricants in the journal box, changing from solid to roller bearings, changing the material used for truck frames and changes in the design of brake rigging and other supporting structures (PX 26, T. 110-112). Breakdowns due to defective track have been averted by improvements in steel-making processes, better supporting track structures and improved maintenance of way equipment (PX 30). The elimination of breakdowns and significant improvements in safety of operations have also resulted from electronic devices such as hot box detectors, dragging equipment detectors, electronic equipment for detecting track fissures and broken flange detectors (PXs 29, 30 and 77). Other technological improvements since the 1920's consist of radio communication, electronically operated

control systems, and a multitude of other improvements in signaling and communication facilities (PXs 27, 28 and 29).

Technological improvements in yard service are epitomized by the new electronically controlled yards. The evidence establishes in some detail the operation of these yards on the carriers serving the State of Arkansas and the manner in which safety and efficiency of operations have been improved with concomitant effect on the crew size required for such operations (PX 31).

One of the most significant changes since the prior decisions has been the conversion of the railroads from short haul local freight carriers to long haul through freight carriers. This change has drastically reduced the workload of train crews by eliminating the handling of less than carload freight, thus obviating the many stops for switching and handling of such freight at intermediate stations. The record establishes in great detail the precise magnitude of this change and its effect on the crew size required for safe operations (T. 62-64, PX 21).

Operating practices have also changed in significant respects. Perhaps the outstanding change insofar as manpower requirements are concerned is the elimination of the flagging requirement when a train stops between stations in territory protected by automatic block signals or centralized traffic control (T. 104-06). The fact that flagging protection is no longer required on most occasions when a train stops between stations means that an extra crew member is now available for the purpose of performing other work in contrast to the situation prevailing prior to 1930. This change alone has reduced the necessary crew size by one man in most freight operations.[1]

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[1] The magnitude of the changes in railroad technology equipment and operating practices is shown in detail with respect to

Moreover, the evidence shows that the specific features of railroad operations relied upon in the prior decisions to justify the requirements of the Arkansas statutes are no longer significant features of railroad operations in Arkansas or elsewhere. This evidence consists primarily of the detailed testimony of a responsible operating officer at the Missouri Pacific who entered railroad service as a brakeman in Arkansas in 1936 and is currently general manager of the Arkansas operations of that railroad (Tr. 109-142). While it is not appropriate at this point to sketch the precise detail, we do respectfully suggest that the District Court correctly evaluated the significance of this evidence and that its findings in that respect are fully and firmly supported by the record.

The improvement in safety of operations attributable to these technological and related changes is most apparent from a comparison of the accident data relied upon in the *Norwood* case and the current similar data. Following its suggestion that "the business of plaintiff is still very hazardous" the District Court in *Missouri Pac. R. Co.* v. *Norwood*, 13 F.Supp. 24, stated:

> "In 1928 (the system), there were 308 collisions and 494 derailments. In that year 45 employees were killed and 1,189 injured in service" (p. 35).

In 1965, collisions were one-tenth of the 1928 figure, derailments approximately one-fifth and total train accidents one-tenth of the 1928 train accidents on the Missouri Pacific (PX 109, p. 24). There were seven employee fatalities in 1965 in contrast to 45 in 1928 and employee injuries in 1965 totaled only a small fraction of the 1928 injuries (PX 109, p. 24). It is indisputable, therefore,

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motive power (PXs 22, 23, 24), freight cars and related equipment (PX 26), signal appliances and facilities (PXs 27, 28), electronic detection devices (PX 29), roadbed and structures (PX 30), yard operations (PX 31) and methods of communication (PX 77).

that railroad operations are now incomparably safer than they were at the time of the *Norwood* decision.

Another significant change which has occurred since the time of the prior decisions relates to the costs of complying with the Arkansas statutes. The prior cases involved only the question of the burden imposed upon the railroads insofar as the requirement of a third brakeman in road service and a third helper in yard service was concerned. This is apparent from the opinion of the three-judge District Court which heard the *Norwood* case on remand from this Court (*Missouri Pac. R. Co.* v. *Norwood*, 13 F.Supp. 24). Discussing the question of the burden involved, the Court noted that the third brakeman required by the Arkansas statutes was shown to impose an annual cost of $76,980.00 (13 F.Supp. at p. 34), when the validity of that statute was first put in issue (*Chicago, R. I. and Pac. R. R. Co.* v. *State of Arkansas*, 219 U.S. 453 (1911)). The Arkansas statute requiring three helpers on yard crews was challenged in *St. Louis, Iron Mountain & Southern Ry. Co.* v. *State of Arkansas*, 240 U.S. 519 (1916), where the cost of the extra switchman was shown to be an annual amount of $54,800.00 (13 F.Supp. at p. 34). When the statutes were challenged again in *Missouri Pac. R. R. Co.* v. *Norwood*, 283 U.S. 249, the cost of maintaining a third brakeman on road freight crews was shown to be $277,975.00 and the third switchman cost was shown to be $203,891.00 (13 F.Supp. at p. 34). These are the cost figures upon which the railroads relied in the prior litigation involving the constitutionality of the Arkansas statutes. No claim was made in that litigation that the fireman operating as a member of the engine crew on steam locomotives was an unnecessary or redundant employee. Thus the entire burden of maintaining firemen on engine crews is an increase in the cost burden which has developed since the prior cases were decided. The cost attributable to firemen in 1965 insofar as the appellee rail-

roads are concerned was $3,770,949.00 (PXs 43, 81, 85, 86, and 88). This alone is sufficient to distinguish the present case from the prior litigation insofar as the nature of the cost burden is concerned. It is also apparent that the cost of maintaining a third brakeman on road freight crews and a third helper on yard crews has increased appreciably since the time of the prior decisions. In contrast to the $54,800.00 cost for a third helper in 1914 the Missouri Pacific shows a present 1965 cost burden of $462,347.00 (PX 85). The third brakeman whose employment was shown to involve a cost of $76,980.00 in 1914 now costs the Missouri Pacific $1,279,035.00 per year (PX 85). In contrast to the total cost of approximately $481,000.00 involved in the 1929 litigation the cost burden which the Missouri Pacific presently must bear because of the Arkansas statutes is $3,500,000.00 (PX 85). It is indisputable that there has been a significant change in the magnitude of the costs attributable to redundant employees required by the Arkansas statutes.

In addition to the changes in technology, equipment, operating practices and costs since the time of the prior decisions, the evidence shows and the District Court relied upon "historical developments in the railroad industry relating to the problem of freight and switching crew consists. Bargaining has taken place, demands and counterdemands have been made, strikes have been threatened, studies and reports have been made, and there have been arbitration awards under which the carriers and the Brotherhoods have operated for substantial periods of time." These developments have resulted in the accumulation of much experience with differing crew sizes and highly persuasive expert analysis with respect to the crew size required for safe operations.

Perhaps the most comprehensive study was made by the Presidential Railroad Commission in 1961 and 1962. All of the intervening labor organizations and the railroads

involved in this litigation were parties to the proceedings before the Presidential Railroad Commission which was created by Executive Order. That Commission considered, through the medium of extensive public hearings, staff studies, studies by the Bureau of Labor Statistics, and observations made by the members of the Commission, the questions of the railroad manning requirements raised by the carriers and the labor organizations. With respect to the factors responsible for its creation and the development of the problems presented to it, the Commission stated:

"This Commission was generated out of a recognition by both labor and management in the railroad industry that basic and even revolutionary changes have occurred in the industry over the past 40 years. The scope of the changes has been so broad that, given the traditions and institutions of the industry, neutral participation was regarded as crucial to the adjustment of work and compensation rules to the changed circumstances. The basic features of these broad changes, as reflected in the hearings, studies, and observations conducted by the Commission, are three.

1. Technological advances, while not necessarily the most important of the changes that have taken place, have probably been the most conspicuous.

Engines have increased in size and power, and diesel has supplanted steam. During the very months in which this Commission was deliberating, one of the last steam engines built for use in the United States was rolled into its permanent resting place in the Museum of History and Technology of the Smithsonian Institution.

Increases in engine power have made possible expansion of the length, weight and sustained speeds of trains.

The size and capacity of trains and cars, as well as improvements in the design and quality of wheels, bearings, rails and roadbed, have had similar effects.

Mechanical and electronic aids have helped to identify and locate defective equipment and hazards on the right-of-way, and thus have been of aid in reducing accidents and delays.

With better planning, there has been more intense use of both engines and cars, and less transportation of empties.

A revolution in communications is well on its way: the telegraph key is no longer the important method of communication that was once prevalent on the road; the telephone and radio are supplanting it. Electronic devices unknown 40 years ago, such as those now used in Centralized Traffic Control, have caused significant changes in the character of road operations.

The use of automatic switching and retarder systems for directing and braking the movement of cars in classification yards, as well as extensive reorganization of the geographic locations at which train classification takes place, have caused wholesale changes in both the nature and volume of yard work" (PX 19, pp. 4-5).

The Commission found and concluded that in view of these revolutionary changes firemen were no longer required for safe operations in freight and yard service (PX 19, pp. 45-46).

Referring to the matter of proper crew size in freight and yard service, the Commission found:

"There is no doubt that certain technological, operational, and traffic changes have tended to reduce the actual workload of employees in some classes or

kinds of service. Among such changes may be cited the virtual disappearance of l. c. l. (less-than-carload-lot) freight, the reduction in the amount of local switching, diminution of passenger service, reduction of the train crew's paper work, the virtual elimination of 'doubling hills' and of helper service, Centralized Traffic Control, the use of the radio-telephone, improvements leading to the detection and reduction of 'hot boxes,' improvements in braking and signal systems, and modernization of classification yards" (PX 19, p. 56).

The Commission also found that crew consist statutes such as the statutes with which we are here concerned "apparently fail to envision modern railroad operations" (PX 19, p. 64).

Arbitration Board No. 282, created by Public Law 88-108 and directed by the law to give controlling weight to safety of operations, also devoted much time and effort to the same issues and reached substantially the same conclusions (PX 20).[1] Moreover, the Award of the Board was placed in effect in the spring of 1964 and much experience was accumulated prior to the trial in the court below concerning safety of operations without firemen and with a typical crew of four employees (engineer,

[1] President Kennedy's Message to Congress preceding the enactment of Public Law 88-108 contained the following description of the technological and related changes underlying the manning controversy in the railroad industry:

> "The rapid replacement of steam locomotives by diesel engines for 97 percent of all freight tonnage has confronted many firemen, who have spent much of their career in this work, with the unpleasant prospect of human obsolescence. The introduction of self-propelled vehicles for railroad maintenance, repair and construction work—the use of longer, heavier, faster and more efficiently filled trains—and the initiation of centralized traffic control, electronic inspection equipment, telephonic and radio communications, and automatic switching and braking equipment have all decreased the need for railroad employment" (PX 18).

conductor and two brakemen). Many Special Boards of Adjustment, functioning pursuant to the Award of Arbitration Board No. 282, also had occasion to consider the relationship between crew size and safety of operations and innumerable awards dealing with this subject were rendered in 1964 and subsequent years. The evidence in this case summarizes these awards and shows generally that the crew sizes found to be appropriate by these Boards were invariably less than the minimum crew of six required by the Arkansas statutes (PX 78).

Another agency created by the Award of Arbitration Board No. 282, known as the National Joint Board, also undertook a study of freight and yard service without firemen and reported, in response to its mandate, in January 1966 that such operations were entirely safe and feasible (PX 79). Joining in this report and subscribing to this conclusion were the carrier members of the Board and the representatives of the Brotherhood of Locomotive Engineers. Only the representative of the Brotherhood of Locomotive Firemen and Enginemen dissented.[1]

Other significant expert appraisal of appropriate crew size, taking into account the changes which have occurred in the past 30 years, appear in the Report of Emergency Board No. 70 (PX 110), the Award of Arbitration Board

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[1] Mr. Perry Heath, Grand Chief Engineer of the Brotherhood of Locomotive Engineers, reiterated this same conclusion in a letter to the Chairman of the Committee on Commerce of the United States Senate dated July 2, 1965, stating:

> "As to the results of our experience study, the engineers report that the Award as applied has not adversely affected either the employees or rail service in general. The engineer's responsibilities without a fireman are just the same as they were with one. In the absence of a fireman, the engineer may now feel it necessary to be more alert than he otherwise might have been had another member of his crew, upon whom he may have relied for some assistance, been available. In short, engineers are now efficiently and safely moving their trains over the road" (PX 79, p. 19).

No. 140 (PX 111), the Report of the Public Service Commission of the State of New York (PX 112), and the Report of the Royal Commission on Employment of Firemen on Diesel Locomotive in Freight and Yard Service on the Canadian Pacific Railway (PX 113). These reports and awards deal comprehensively with the revolutionary changes in railroad technology and operations since the *Norwood* case and the effect of such changes on the type of crew required for safety of railroad operations.

Thus the lower court had before it not only the evidence of changes in technology, equipment and operating practices, but the vast accumulation of experience and expert analysis with respect to the proper crew size for safe and efficient freight and yard operations. The conclusion of the lower court was that these developments since the time of the prior decisions deprived those decisions of any controlling significance on the issues posed by the complaint. It concluded in effect that these decisions did not prohibit a searching analysis of the present relationship between safety of operations and the requirements of the statutes in question. In view of the volume and the pertinence of the evidence upon which the District Court based its findings and conclusions, it is clear that the factual reexamination which it made was entirely appropriate and does not present any question warranting review by this Court.

Appellants' suggestions to the contrary consist in part of the argument that employees' duties are now the same as they were at the time of the *Norwood* decision (J. S., p. 7). This argument ignores the fact that the general duties, such as flagging, maintaining a lookout, assisting with the work at station stops, etc. encompass entirely dissimilar detail and responsibilities under present operations than was true of the 1930 situation. Flagging is still a duty of brakemen but is virtually unnecessary to-

day in road service (Tr. 104-06). Maintaining a lookout today in view of the introduction of electronic detector aids and radio communication facilities is also wholly different from the same duty in 1920. Similarly, assisting in the work at station stops, which constituted a real burden 40 years ago, is something else today since most of such stops have been eliminated and the loading and unloading of package freight is no longer characteristic.

Appellants also suggest that there have been no technological or related changes of any significance, referring specifically to freight cars, air brakes, track and structure, and signal protection (J. S., pp. 7-8). With respect to these specific areas the record contains the most detailed and persuasive evidence of the significant changes since the *Norwood* decision. (Freight cars, PX 26; Air brakes, PX 26, and PX 22, pp. 45-51; Track and structure, PX 30; Signal protection, PXs 27 and 28; PX 29, pp. 1-2; PX 25, pp. 8-9; PX 46, p. 2; PX 77, p. 30.) Appellants' statements are wholly unsupported by the record.[1] Moreover, the issue which appellants seek to raise in this connection is one of a limited factual nature which can hardly be characterized as a substantial federal question warranting plenary review by this Court.

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[1] In this connection, appellants assert that "most Arkansas track is 'dark railroad' not governed by any type of automatic signals" (J. S., p. 8). The fact is that virtually all of the main line mileage in Arkansas, over which most of the traffic moves, is protected by centralized traffic control or automatic block signals which has been installed since the time of the *Norwood* decision (PX 27, pp. 13 and 16; PX 29, pp. 1-2; PX 25, pp. 8-9; PX 46, p. 2; PX 77, p. 30). Branch lines, which frequently have only one train per day operating over them may not have automatic signal protection but such protection is obviously unnecessary on such lines (PX 27, p. 7). Moreover, data for all railroads in the United States shows a greater proportion of mileage unprotected by automatic signals than is true of the mileage in Arkansas (PX 28, p. 18). Signal protection in Arkansas is thus superior to that prevailing in the other states in which operations are conducted with smaller crews.

II. THE DISTRICT COURT, IN CONCLUDING THAT THE ARKANSAS CREW REQUIREMENTS "ARE UNREASONABLE AND OPPRESSIVE AND THAT THEY VIOLATE THE DUE PROCESS CLAUSE AND UNCONSTITUTIONALLY BURDEN INTERSTATE COMMERCE," CORRECTLY APPLIED THE CONTROLLING PRECEDENTS OF THIS COURT AND ITS FACTUAL FINDINGS ARE OVERWHELMINGLY SUPPORTED BY THE EVIDENCE.

A. Applicable Constitutional Principles.

Due Process.

The District Court approached the question of the applicable legal guidelines by noting that "the governing legal principles are clear and, indeed, are not substantially disputed." Referring first to the due process issue, the Court stated:

> "As far as the Due Process Clause is concerned, the statutes are not unconstitutional if their requirements are reasonably related to safety of operations, and if they are not unduly oppressive, restrictive, or costly in comparison with the safety benefits achieved. See, in addition to the cases involving the Arkansas statutes: Goldblatt v. Town of Hempstead, 369 U.S. 590, 594-595; Lawton v. Steele, 152 U.S. 133, 137; Weinberg v. Northern Pacific Ry. Co., 8 Cir., 150 F.2d 645.
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> "If the reasonableness of the requirements of the statutes remains fairly debatable, this Court will not substitute its views for those of the Legislature; we do not sit to exercise 'legislative judgment.' United States v. Carolene Products Co., 304 U.S. 144; South Carolina State Highway Commission v. Barnwell Brothers, Inc., 303 U.S. 177; Standard Oil Co. v. City of Marysville, 279 U.S. 582; Weinberg v. Northern Pacific R. Co., supra" (274 F.Supp. at 299).

In *Goldblatt* v. *Town of Hempstead*, 369 U.S. 590 (1962), cited by the District Court, the validity of an ordinance

prohibiting defendants from operating a sand and gravel pit unless they had obtained a permit was questioned. This Court expressed the due process test in this language:

> "The question, therefore, narrows to whether the prohibition of further excavation below the water table is a valid exercise of the town's police power. The term 'police power' connotes the time-tested conceptional limit of public encroachment upon private interests. Except for the substitution of the familiar standard of 'reasonableness', this Court has generally refrained from announcing any specific criteria. The classic statement of the rule in Lawton v. Steele, 152 U.S. 133, 137, 14 S. Ct. 499, 501, 38 L. Ed. 385 (1894), is still valid today:
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> "'To justify the state in * * * interposing its authority in behalf of the public, it must appear—First, that the interests of the public * * * require such interference; and, second, that the means are reasonably necessary for the accomplishment of the purpose and not unduly oppressive upon individuals.'"

The case of *Lawton* v. *Steele,* 152 U.S. 133 (1894), referred to by the Court in *Goldblatt* as "still valid today" involved a state statute providing that any fish nets, panels or other devices used in violation of law shall constitute public nuisances. This Court said (152 U.S. 137):

> "* * * To justify the state in thus interposing its authority in behalf of the public, it must appear—First, that the interests of the public, generally, as distinguished from those of a particular class, require such interference; and, second, that the means are reasonably necessary for the accomplishment of the purpose, and not unduly oppressive upon individuals. The legislature may not, under the guise of protecting the public interests, arbitrarily interfere with private

business, or impose unusual and unnecessary restrictions upon lawful occupations; in other words, its determination as to what is a proper exercise of its police powers is not final or conclusive, but is subject to the supervision of the courts. * * *"

Perhaps the basic test is most clearly indicated by this Court's description in *Goldblatt* of the evidence which would be relevant to this inquiry:

"The ordinance in question was passed as a safety measure, and the town is attempting to uphold it on that basis. To evaluate its reasonableness we therefore need to know such things as the nature of the menace against which it will protect, the availability and effectiveness of other less drastic protective steps, and the loss which appellants will suffer from the imposition of the ordinance" (369 U.S. at 595).

Thus there is no conclusive presumption that the legislative determination was reasonable. In view of the challenge on due process grounds, the District Court correctly perceived its responsibility to test the reasonableness of the statutory requirements by reference to evidence that shows the burden imposed by the statutes and the absence of any relationship between the requirements of the statutes and safety of railroad operations.

Undue Burden on Interstate Commerce.

On the question of burden on interstate commerce, the District Court stated the relevant principles as follows:

"As to the Commerce Clause, it goes without saying that Arkansas may not lawfully discriminate against interstate commerce, nor may the State unreasonably burden that commerce. With respect to the burdening of interstate commerce it should be pointed out that the Commerce Clause and the Due

Process Clause are not exactly co-extensive. A State regulatory statute which may survive a due process attack may fall before the Commerce Clause. Bibb v. Navajo Freight Lines, 359 U.S. 520, 529.

"In the absence of ruling federal legislation or regulatory action, a State is free to adopt local safety legislation which may affect interstate commerce, provided that the enactment serves a real and legitimate purpose and is not unduly burdensome on that commerce. But, the general rule is that State regulation which interferes with the free flow of interstate commerce or which materially affects it in areas where uniformity of regulation is required, is invalid under the Commerce Clause. Morgan v. Virginia, 328 U.S. 373; Southern Pacific Co. v. Arizona, 325 U.S. 761.

"At times, a State safety statute may have a distinct impact on interstate commerce, and when such a situation arises, there must be a judicial balancing of the legitimate State interest against the national interest in the flow of interstate commerce free from local regulation. Bibb v. Navajo Freight Lines, supra; Southern Pacific Co. v. Arizona, supra" (274 F.Supp. 300).

As the quoted language indicates, the District Court relied heavily on prior decisions by this Court. In one of the cited cases, *Southern Pacific Co. v. Arizona*, 325 U.S. 761 (1945), Chief Justice Stone defined the constitutional issue as follows:

"Hence the matters for ultimate determination here are the nature and extent of the burden which the state regulation of interstate trains, adopted as a safety measure, imposes on interstate commerce, and whether the relative weights of the state and national interests involved are such as to make inapplicable the rule, generally observed, that the free

flow of interstate commerce and its freedom from local restraints in matters requiring uniformity of regulation are interests safeguarded by the commerce clause from state interference."

In holding that the statutes materially impeded the free flow of interstate commerce, constituted a substantial obstruction to the national policy proclaimed by Congress to promote adequate, economical and efficient railway transportation service, and that the state interest was thus outweighed by the national interest, the Court considered the following matters in evidence as relevant to determination of the constitutional question:

(1) The practice of the railroad industry of the nation with regard to operating trains in excess of the limits imposed by the statutes in question.

(2) The cost to the two railroads traversing Arizona of complying with the statutes.

(3) The effect of statutes of other states then regulating the same subject, and the effect of such regulations if other states should in the future undertake to regulate the subject.[1]

(4) The judicial finding of fact (in opposition to those purportedly or presumably found by the legislature in connection with the enactment of the statutes) that the laws when viewed as safety measures af-

[1] This Court has again recognized the relevance of the cumulative burden of similar regulation (both existing and potential) by other states and their political subdivisions in measuring the extent to which the regulation actually does or could burden interstate commerce as recently as *Hess* v. *Illinois*, 385 U.S. 809 (1967). The Court there observed: "And if the power of Illinois to impose use tax burdens upon National were upheld, the resulting impediments upon the free conduct of its interstate business would be neither imaginary nor remote. For if Illinois can impose such burdens, so can every other State, and so, indeed, can every municipality, every school district, and every other political subdivision throughout the Nation with power to impose sales and use taxes."

forded "at most slight and dubious advantage, if any, over unregulated train lengths."

(5) Comparative accident figures showing experience in states where the subject matter is not regulated.

The Court, in testing the true relationship of the purported purpose of safety, and the actual effect of the statutes, defined the test as follows:

> "The decisive question is whether in the circumstances the total effect of the law as a safety measure in reducing accidents and casualties is so slight or problematical as not to outweigh the national interest in keeping interstate commerce free from interferences which seriously impede it and subject it to local regulation which does not have a uniform effect on the interstate train journey which it interrupts."

The cases dealing with the validity of "full crew" laws were distinguished on the basis that the Court had considered their restrictions to be "a minimal burden on the commerce" compared to other subjects of state regulation which had been struck down under the Commerce Clause. Of course, the facts upon which the full crew laws were considered to be a "minimal burden" on commerce are substantially changed in many respects including relative cost of compliance, experience with their effectiveness as safety measures, and their unequal application to interstate and intrastate commerce. It is significant to note that the annual cost of complying with the Arizona statutes was about $1,000,000 to the two railroads traversing that State, compared with the annual cost of approximately $7,600,000 to appellees of compliance with the Arkansas Statutes.

In *Morgan* v. *Commonwealth of Virginia*, 328 U. S. 373 (1946), also relied upon by the District Court, this Court defined the test of constitutionality of state regulation of interstate commerce as follows:

"The precise degree of a permissible restriction on state power cannot be fixed generally or indeed not even for one kind of state legislation, such as taxation or health or safety. There is a recognized abstract principle, however, that may be taken as a postulate for testing whether particular state legislation in the absence of action by Congress is beyond state power. This is that the state legislation is invalid if it unduly burdens that commerce in matters where uniformity is necessary—necessary in the constitutional sense of useful in accomplishing a permitted purpose. Where uniformity is essential for the functioning of commerce, a state may not interpose its local regulation."

In defining a "burden on commerce" this Court said:

"Burdens upon commerce are those actions of a state which directly 'impair the usefulness of its facilities for such traffic.' That impairment, we think, may arise from other causes than cost or long delays. A burden may arise from a state statute which requires interstate passengers to order their movements on the vehicle in accordance with local rather than national requirements."

With regard to the relevance of other laws to show cumulative burdens, this Court said:

"To appraise the weight of the burden of the Virginia statute on interstate commerce, related statutes of other states are important to show whether there are cumulative effects which may make local regulation impracticable."[1]

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[1] When crew consist legislation was accorded wider favor in this country, there was an absurd lack of uniformity with regard to the size of the crews prescribed as well as the circumstances to which the laws applied. In these declining days of this sort of "make-work" legislation, only Arkansas, Wisconsin, Ohio, Indiana and New York impose requirements of extra employees that effectively and substantially burden commerce. In these circumstances, a corollary necessarily emerges to the rule that legislation in other

There were ten states requiring segregation on motor carriers and eighteen prohibiting it. This Court concluded:

> "As there is no federal act dealing with the separation of races in interstate transportation, we must decide the validity of this Virginia statute on the challenge that it interferes with commerce, as a matter of balance between the exercise of the local police power and the need for national uniformity in the regulations for interstate travel. It seems clear to us that seating arrangements for the different races in interstate motor travel require a single, uniform rule to promote and protect national travel. Consequently we hold the Virginia statute in controversy invalid."

Logic, in light of present prevailing train operations involving rapid movement of trains through many states on single runs, would seem to render the requirement of additional crew members a much greater burden on commerce than regulation of passenger seating arrangements. Passengers could be reseated without the necessity of stopping or delaying the conveyance or imposing any additional costs on the commerce. Compliance with the state crew requirements requires delay incident to taking on and letting off the additional crew member as the train moves across state boundaries, and also imposes a substantial additional cost on the interstate commerce.

Bibb v. *Navajo Freight Lines*, 359 U.S. 520, 3 L. Ed. 2d 1003, 79 S. Ct. 962 (1959) is the most recent decision of this Court cited by the lower Court that carefully treats

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states is relevant in weighing the impact of these laws on interstate commerce. It is that the absence of such legislation is also relevant. No state adjacent to Arkansas still has such laws. Thus every train coming into this state meeting the standards of the Arkansas statutes will have a smaller crew than prescribed by them and therefore must be stopped or slowed to take on extra employees. The details of these ridiculous rituals at or near the Arkansas state line are later discussed herein.

the points significant in determining whether a state statute places an undue burden on interstate commerce. An Illinois statute applicable to, *but not discriminating against,* vehicles traveling in interstate commerce and which required a certain type of mudguard on trucks and trailers was held invalid as unduly burdening interstate commerce.

Citing as involving a related problem, *Southern P. Co.* v. *Arizona,* and as more closely in point, *Morgan* v. *Virginia,* this Court concluded that the statute placed an impermissible burden on interstate commerce. It also rejected the argument that no showing of burden on interstate commerce is sufficient to invalidate local safety regulations in the absence of some element of discrimination against interstate commerce, saying that to support that contention it is necessary to read *South Carolina State Highway Dept.* v. *Barnwell Bros.,* 82 L. Ed. 734 in isolation from later decisions such as *Southern Pacific Co.* and *Morgan* v. *Virginia.*

In summary, the District Court correctly concluded that the commerce clause permits the states, acting pursuant to the police power in protection of public health or safety, to incidentally burden interstate commerce so long as Congress has not occupied the field, but such burden must produce a benefit to the public as a whole (not to a particular class), fairly commensurate with the cost, delay, inefficiency, and inconvenience produced by the regulation.[1]

In the light of these governing principles, the District Court stated the controlling issue as follows:

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[1] To meet this standard the crew consist laws would have to produce a genuine and substantial (because their burden is substantial) element of public protection. Thus the statistical proof, standing alone, is enough to demonstrate the invalidity of these laws. The most modest claim that could be made for the statistics in evidence is that they conclusively demonstrate that railroad operations in states with predominately four man crews are at least as safe as comparable operations in Arkansas with six man crews."

> "... whether under present railroad operating conditions the minimum six man crew requirements of the two Arkansas full crew statutes remain as valid exercises of the State's police power in the field of railroad safety or whether they now amount to arbitrary requirements which are unreasonable, oppressive and unduly burdensome on interstate commerce."

The Court emphasized that the Arkansas statutes "are presumed to be valid" that, "the burden is upon plaintiffs to establish the invalidity of the statutes and if upon a consideration of the whole record a reasonable doubt upon the question remains, that doubt must be resolved in favor of the validity of the statutes." Obviously, the District Court indulged every reasonable presumption in favor of the statutes and found them to be invalid only on the basis of overwhelming evidence establishing their oppressiveness and utter unreasonableness.[2]

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[2] In the District Court appellees also urged that these statutes discriminated against interstate commerce and violated the Equal Protection Clause. The court below found it unnecessary to consider these claims because of its holding that the statutes were clearly unconstitutional on other grounds. 274 F.Supp. 300. Should probable jurisdiction be noted, we will also urge the equal protection and discrimination against interstate commerce points as a basis for affirmance. Regarding the discrimination point, the statutory provisions, in effect, exempt all intrastate railroads and restrict the application of the laws to interstate railroads. Cf. *Best & Co.* v. *Maxwell*, 311 U.S. 454 (1940). Each of the seventeen intrastate railroads in Arkansas has less than fifty miles of track and all are thus exempt from the operation of these laws (PX 67, Ex. B, PXs 47 and 48). The switch crew law applies to 98.7 per cent of the interstate railroad trackage in Arkansas, and the freight crew law applies to 99.5 per cent of such trackage. By their exemptions these laws achieve perfection in relieving the local railroads from their burdens, and fall only slightly short of perfection in extending their discriminatory requirements to all interstate railroad operations in the state. They are directed against interstate commerce alone, and this discrimination brings them clearly within the prohibition of the Commerce Clause. The proof is clear that there is no rational basis for these exemptions based upon the number of miles of track operated by a railroad except the impermissible purpose to exempt the local interests (PX 47 through

B. The District Court's Determination That the Requirements of the Arkansas Statutes Make No Significant Contribution to Safety Is in Accord With the Overwhelming Weight of the Evidence.

In concluding that the Arkansas crew size requirements do not contribute to safety of operations, the District

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PX 63). Thus, the pattern of coverage of these statutes is a classic example of what this Court was referring to when it said:

> "Provincial interests and local political power are at their maximum weight in bringing about acceptance of this type of legislation. With the forces behind it, this is the very kind of barrier the commerce clause was put in the fundamental law to guard against." *Nippert* v. *City of Richmond*, 327 U.S. 416, 434 (1946).

It is also well settled that the Equal Protection Clause requires that statutory classifications be based on differences that are reasonably related to the statutory purposes. *Morey* v. *Doud*, 354 U.S. 457 (1957). Moreover, it has been reaffirmed recently that the Clause "imposes a requirement of some rationality in the nature of the class singled out." *Rinaldi* v. *Yeager*, 384 U.S. 305 (1966). There is in this record a significant body of data that could not have been before the earlier courts consisting of the findings of many impartial and expert Boards and Commissions as to minimum safe railroad manning requirements. None of these panels recognized the number of miles operated by a railroad as a relevant criteria in fixing minimum crew sizes. There is no proof in the record tending to support the fifty and one hundred mile classifications as rationally related to the safety of railroad operations. The most enlightening body of proof on this point presented by plaintiffs below —that pertaining to the railroad operations in Arkansas that enjoy exemption from the statutes because of the classification—is wholly unrebutted. PX 47 through PX 74 shows the similarity of the operations of the seventeen intrastate railroads to those of plaintiffs, and that fifteen of the seventeen are able to conduct those operations with crews smaller than the statutory six men with no apparent sacrifice of safety considerations. Indeed, it is apparently conceded that the inflexible statutory requirements of six-man crews result in excess employees unneeded to conduct safe operations in many instances. In the Jurisdictional Statement of the Brotherhoods their position on the matter is said to be "*that under at least some circumstances* the crews specified by the Arkansas statutes are necessary for safety" (emphasis supplied). The evidence is massive, and overwhelmingly one-way, that the only rational basis for the mileage classification of these statutes is a constitutionally impermissible one. However, since the District Court did not rely on the Equal Protection Clause in holding the statutes unconstitutional we do not extensively discuss that evidence in this argument in support of the Motion to Affirm.

Court relied heavily on evidence of comparable operations in other states with smaller crews.

In other cases involving issues similar to those present here, comparable emphasis has been placed on evidence of operations not subject to the challenged requirements. Thus, in *Weinberg* v. *Northern Pacific Railroad Company*, 150 F. 2d 645 (8th Circuit), involving the constitutionality of an ordinance requiring a fireman on 44-ton diesel yard engines, the Court relied to a large extent on the experience of other railroads in operating this type of equipment without a fireman. Similarly, in *City of Shreveport* v. *Shreveport Railway Company*, 37 F. 2d 910 (C. A. 5, 1930), the Court held that the ordinance requiring two men on street cars, "in light of the proven experience of other cities, is arbitrary and amounts to taking plaintiff's property without due process of law". Perhaps the primary authority on the significance of such evidence is *Southern Pacific Company* v. *Arizona*, 325 U. S. 761, where this Court invalidated an Arizona statute regulating the length of freight trains. With respect to the paramount issue of safety this Court relied primarily on the operating and safety experience of railroads in Arizona subject to the statute and railroads in other states which operated without such statutory limitations. This Court concluded, on the basis of such evidence, that the statute had "no reasonable relation to safety" (p. 775). The record in the present case permits the same type of comparison and strongly supports the District Court's conclusion that the statutory requirements at issue make no contribution to safety of operations.

This comparative evaluation is greatly facilitated by the significant changes in crew size which have occurred on the American railroads since May of 1964 under the Award of Arbitration Board No. 282. That Award, applicable to virtually every major American railroad, has resulted in the elimination of a majority of the firemen's

positions in road and yard service (PX 109). Special Boards of Adjustment, functioning pursuant to the Award, and agreements made pursuant to the provisions of the Award, have also reduced the number of brakemen and helpers used on crews in road and yard service (Exhibits 1 to 6, inc., to PX 78). During this same period of time, extensive data has been accumulated by the Interstate Commerce Commission with respect to safety of railroad operations. This data permits a comparison of the safety of railroad operations on a year-to-year or a month-to-month basis, as well as a comparison of the relative safety of operations in the various states (PX 109). The data thus available, when properly related to changes in crew size, permits conclusions to be drawn as to the relationship between given crew sizes and safety of operations. Extensive data of this nature appears in the record and shows beyond a doubt that the requirements of the Arkansas statute resulting in a crew of six employees in freight and yard service make no contribution to safety of operations.

To refer briefly to the basic data, the evidence shows that casualties arising from train and nontrain accidents were almost 5 percent lower in 1965 than in 1964 and were below the level of casualties in 3 out of the 4 preceding years (PX 109, p. 6). During this period of time when casualties from train operations were declining, other data shows that the percent of freight and yard operations conducted without firemen was increasing, from 20 percent in 1964 to 47.6 percent in 1965 (PX 109, p. 6). Other data, including casualty rates computed on the basis of train miles, illustrate the same trend of declining casualties and rising proportions of service conducted without firemen (PX 109, pp. 7-9). Obviously, the decline in casualties accompanying the abolishment of firemen's positions is most precise proof of the fact that the firemen required by the Arkansas statutes do not contribute to safety of operations.

Additional proof of the basic fact that the crew size requirements of Arkansas statutes do not promote safety of operations appears from a comparison of casualties arising from train operations in Arkansas and in other states. With respect to such casualties, Arkansas experienced an increase of 2.5 percent during the 12-month period ended June 30, 1965, while data for the United States as a whole showed a decline of .8 percent (PX 109, p. 20). During this period of time 39.2 percent of freight and yard operations in the United States as a whole were conducted without firemen (PX 109, p. 20). In Arkansas, of course, the statutory requirements resulted in the continued presence of firemen on diesel locomotives and the presence of three brakemen and three helpers in freight and yard service.

In the period from June 30, 1965, to June 30, 1966, casualties in train and train service accidents declined both in Arkansas and in the United States as a whole (PX 109, p. 20). During this period of time, 52.1 percent of freight and yard operations in the United States were conducted without firemen in contrast to the Arkansas situation (PX 109, p. 20). Other evidence shows that train crews in other states typically consist of fewer than the three brakemen required by the Arkansas statutes and that yard crews generally have fewer than the three helpers required by the Arkansas statutes (T. 421-422). Thus the trends for Arkansas and the United States as a whole, taking the crew size differences into consideration, clearly destroy the predicate upon which the Arkansas statutes must be justified.

Data published by the Interstate Commerce Commission also permits comparisons between railroad operations in Arkansas and in states adjoining Arkansas. In the adjoining states (Louisiana, Mississippi, Missouri, Oklahoma, Tennessee and Texas) there were no statutory requirements with respect to the size of crew used in freight and

yard service during the period covered by the data in question. The award of Arbitration Board No. 282 and the awards of Special Boards of Adjustment thus operated to reduce the size of the crews in the adjoining states after May 7, 1964 (T. 325). Generally the crews manning freight trains in such adjoining states consisted of four employees (engineer, conductor and two brakemen) and in yard service the typical crew consisted of an engineer, a foreman and two helpers (PX 1-17, 32-42, and 90). In contrast, the Arkansas statutes required crews consisting of six employees. With respect to safety of operations the available data shows that from June 30, 1964 to June 30, 1966, a 24-months period during which the award of Arbitration Board No. 282 was in effect, the trend of train accidents in Arkansas and in adjoining states was approximately the same (PX 109, p. 21). With respect to casualties in train and train service accidents this same pattern of comparability exists. Thus from June 30, 1964 to June 30, 1965, a 12-month period during which the Award of Arbitration Board No. 282 was in effect, casualties from train and train servvice accidents decreased by 4.4 percent in the states adjoining Arkansas and increased by 2.5 percent in Arkansas. In the following 12-month period from June 30, 1965 to June 30, 1966, casualties increased by 1.1 percent in the adjoining states and decreased by 5 percent in Arkansas (PX 109, p. 21). Thus despite the substantial differences in crew size in freight and yard operations as between Arkansas and the six adjoining states, the casualty experience for Arkansas and the adjoining states was approximately the same.

Further support for the findings of the District Court appears in the comparative data relating to the Arkansas operations of the appellee railroads and their operations in other states. With respect to casualties in train and train service accidents from 1961 to 1966, there was a reduction of 13.1 percent in Arkansas and 16.1 percent in

other states through which the appellee railroads operate (PX 109, p. 29). From 1964 to 1965 there was a reduction in the casualty rate for employees in train and train service accidents in Arkansas and a slight increase in other states (PX 109, p. 29). In the following year, however, the casualty rate increased in Arkansas and declined in other states (PX 109, p. 29). Certainly if there is any support for the proposition that the six-man crews in Arkansas provide safer operations than the four-man crews used by the appellee railroads in other states, it cannot be found in the reported data with respect to train and train service accidents and casualties arising therefrom. On the contrary, the relevant data shows beyond a doubt that the Arkansas size crews do not result in safer operations than the four-man crews which the appellee railroads utilize in the other states in which they conduct their freight and yard operations.[1]

The experience of the railroads in the conduct of operations with reduced crews following the Award of Arbitration Board No. 282 was analyzed in great detail in the

[1] It is indisputable that these comparisons between Arkansas railroad operations and operations in other states are proper. Operations in Arkansas constitute an integral part of the interstate network of railroads with basically similar operating characteristics. Track and roadbed is standard from state to state in weight and other characteristics (PX 30). The same is true of signal protection (PXs 27, 28, 29, 37, 41 and 77) and the standard code of operating rules provides national uniformity in that area (IX 36). Communication facilities are alike from state to state (PX 77). Equipment moves throughout the country on an interchange basis and motive power is basically the same on the various railroads (PXs 22, 23, 24 and 26). Train studies show that the consist and operating characteristics of trains are the same in Arkansas and adjacent states except for the size of the crew (PXs 1-17, 33-42 and 75-76). Moreover, testimony of operating officers establishes comparability in all essential respects (Tr. 150-51, PXs 25, 32, 46, 77 and 90). Apparently the Brotherhoods agree since their principal witnesses (Messrs. Homer, Clark and Wilkerson) relied upon the results of and the nature of operations in the national as a whole in attempting to justify the Arkansas crew size requirements.

Report of the National Joint Board created by Arbitration Board No. 282. Part 4 of the Report of the National Joint Board discusses studies of safety of operations in freight and yard service with and without firemen (PX 79, pp. 64-103). It is particularly significant that the studies made by the Brotherhood of Locomotive Engineers disclosed that it was the consensus of its officers, representatives, and members that the elmination of firemen jobs had not adversely affected the safety of railway operations (PX 79, pp. 18-19). Thus, in January of 1966, the Brotherhood of Locomotive Engineers, representing the members of the engine crew who continue to work in freight and yard service in the absence of firemen, concluded that there was no evidence of any adverse effect on safety of operations resulting from the elimination of firemen positions. We emphasize the fact that the engineers, as the remaining members of the engine crews in freight and yard service, have a most immediate and direct interest in safety of operations. When the report in question was made the engineers had been participating in such operations over a period of almost two years and the organization undertook to make its study representative of railroads throughout the United States (PX 79, 124-126). The conclusions stated by the Brotherhood thus support the finding of the Court that firemen in diesel service do not contribute to safety of operations. As the Grand Chief of the Brotherhood stated the matter in a letter to the Chairman of the Committee on Commerce of the United States Senate, the removal of the firemen under the Award has not adversely affected the safety of the remaining employees (PX 79, p. 19).

In addition to this overwhelming evidence of comparable and safe operations in other states with smaller crews, the record shows in detail the progressive obsolescence of the jobs of firemen and third brakeman in freight and yard service. On this issue, the District Court found as follows:

> "We find from the overwhelming weight of the evidence that by the mid-1950s, if not before, the fireman on a diesel locomotive and the third brakeman or helper had, in general, ceased to perform significant safety functions in the operation and switching of freight trains and cars" (p. 15).

The most immediate and compelling support for this conclusion is the evidence of technological and related changes in railroad operations discussed above. These changes, properly evaluated, show that the District Court's finding is unimpeachable.

Many of these changes in technology and operations are directly related to particular circumstances relied upon in the prior cases to support the claimed relationship between the statutory requirements and safety of operations.

Changes in Circumstances Relied Upon in the 1907 Case.

The practice in 1907 of using hand brakes to help retard the speed of the train in an emergency has been abandoned. Stopping a train with the present brake equipment would simply involve manipulating the conductor's brake valve on the caboose or the emergency valve on the fireman's side in the locomotive (T. 99-100). This involves simply pulling a lever and is obviously a one man job (PRX 21, pp. 27-8). The conductor's paper work has been significantly reduced (T. 100), and inspections of trains are performed principally by mechanical forces at terminals, assisted by such modern equipment as hot box detectors (T. 146). When a train is inspected by members of a train crew, it is simply a visual observation and can be performed by one man (T. 134-5).

The structural strength of modern cars is such that the "pulled drawbar" is a much less frequent occurrence than in 1907 (PX 26, pp. 15-6). There are many days when

there is not a single occurrence of this type on any of the some sixty trains operated daily in Arkansas by Missouri Pacific (T. 100-101). When it does occur, two men can "easily" take the necessary remedial action (T. 102) which now involves use of a 44 pound flexible cable instead of chains weighing about three times as much (T. 102-103).

On a diesel locomotive there is no reason for either the fireman and engineer to remain on the engine when a train separation occurs and advances in signal equipment have permitted rule changes pertaining to flag protection to such a degree that it is a rare occasion that a train stopped between stations would need to use a crew member as a flagman (T. 104). In these rare occasions, the duty of flagman is performed only briefly until it is insured that the adjacent track has not been fouled as a result of the emergency stop, then he returns to the train and is available to assist with any work to be done on the train (T. 105-106). Therefore, when a train is stopped between stations, all members of the crew are available, either immediately or within a very brief period to assist with any work to be done on the train. The fact that flagging protection is no longer required on most occasions when a train stops between stations means that an extra crew member is now available for these purposes in contrast to the situation prevailing in 1907 and 1933. However, there are no conditions that occur to trains that require six men to correct (T. 106).

Trains are still frequently stopped at, and switched across, public crossings, and when flagging protection is needed this is a one man job. The Uniform Code of Operating Rules so provide (T. 106-7). Operating modern couplers simply involves raising a lever on the side of the car, and like connecting air hoses which takes four or five seconds, is a one man job. Trainmen are no longer required to disconnect air hoses (T. 107-8).

In summary, none of the conditions shown to have existed in 1907 that might rationally have been considered to support a finding that a third brakeman contributed to safety of railroad operations exists in such form as to support a similar finding today.

It is interesting that the Supreme Court of Arkansas considered it noteworthy in support of its conclusion that the requirement of a third brakeman was not demonstrably unreasonable that the largest railroad in the state voluntarily used three brakemen on certain assignments. Certainly that fact did have probative value on that issue, just as the fact that every railroad in the nation today uses no more than two brakemen (unless inhibited by state law or labor agreement) has probative value on the issue of whether a third brakeman is required for safe operations under present conditions (PX 18, Report of President's Advisory Committee; PX 19, pp. 54-7).

Changes in Railroad Operations Since the Trial of Norwood.

In *Norwood*, the Attorney General of Arkansas, representing the defendants, listed in his post-trial brief the facts in evidence that he claimed tended to justify the crew consist laws. That listing composed of pages 123-132 of his brief is PX 99. At the trial of the case at bar Mr. Sheppard testified concerning the relevant changes from the conditions shown in PX 99 (T. 109-142).[1] It is a fair summary of that testimony that no circumstance reflected

[1] Mr. Sheppard and Mr. Pelton were the principal witnesses at the trial for the railroads and the Brotherhoods respectively, pertaining to railroad operations. At the time of trial Mr. Sheppard was the general manager of the district of Missouri Pacific Railroad Company which included Arkansas. He entered that company's employment as a brakeman in Arkansas in 1936, and therefore his knowledge of these operations is generally contemporaneous with those reviewed in *Norwood*.

Mr. Pelton was employed by Missouri Pacific Railroad Company as a locomotive engineer and had formerly been an operating officer of the company in Arkansas and other states.

in PX 99 that could be regarded as tending to justify the need for six crew members continues to exist, considered alone or cumulatively with the other circumstances attending present railroad operations, to such a degree that it tends to justify a need for a six man crew today.

The magnitude of the changes in railroad technology and operating practices since the time of the *Norwood* decision is also shown in great detail by the testimony and exhibits of Mr. German and Mr. Rich with respect to motive power (PXs 22, 23, 24), Mr. Meinholtz with respect to freight cars and related equipment (PX 26), Mr. Marak with respect to signal appliances and equipment (PXs 27, 28), Mr. Alford with respect to methods of dealing with hot boxes (PX 29), Mr. Laird with respect to roadbed and structures (PX 30), Mr. Malott with respect to yard operations (PX 31) and Mr. Troth with respect to means of communication (PX 77). The evidence presented by these witnesses is indeed a most detailed and persuasive delineation of the revolution in technology and practices which has characterized railroad operations since the time of the *Norwood* decision.

The *Norwood* court mentioned a number of circumstances that it apparently thought relevant to support these statutes, and the proof in the case at bar shows significant differences in the present comparable circumstances. Most of these changes are alleged in paragraph 12 of the Complaint and we set out some of them here to demonstrate that the district court measured the need for a six man crew on facts showing railroad operations with differences from those in *Norwood* as extensive as those between a stage coach and modern Greyhound bus.

Locomotives:

Norwood described in detail the character of motive power used by Missouri Pacific, and listed its inventory

of steam locomotives in 1931 as 824 freight locomotives and 217 switch engines. The figures supplied in the opinion reveal that 410 of the freight locomotives had been in service since prior to 1908. 13 F.Supp. 26-7. On July 1, 1966, this Company had 110 freight locomotives, 158 switch engines, and 416 multiple purpose locomotives available for either freight or switching service (PX 23, p. 72), and each of these locomotives employed diesel-electric power. The last steam powered locomotive was retired by Missouri Pacific in 1955 (PX 22, p. 13). None of appellees operate any steam locomotives today. The only steam locomotives still operating in the state belong to a railroad exempted from these laws (PX 52). This complete conversion to diesel-electric motive power substantially reduces hazards and discomfort to crew members, and eliminates the duties previously performed by the fireman (PX 22, 23 and 24). During the year ending June 30, 1931, 16 persons were killed and 259 injured due to failures in steam locomotives on all Class I railroads in the United States, and during the 10-year period ending June 30, 1931, six persons were killed and 169 injured from this cause on the Missouri Pacific alone (PX 23, p. 6). Locomotive improvements contributing to safety of employees have been such that in 1965 no person was killed or injured due to failures in diesel locomotives on any Class I railroad in the United States and only ninety-three persons received injuries due to defects in diesel locomotives (PX 23, p. 71). Since 1937 no person has been killed due to a defect in a Missouri Pacific diesel locomotive, only 32 have been injured from such cause, and only three persons have sustained such injury in Arkansas (PX 23, p. 71).

Freight Cars, Couplers, Brakes, Trackage and Roadbed.

Improvements made since the Norwood decision have included strengthening rolling stock, complete elimination

of arch bars and wooden underframes on cars, adoption of journal lubricator packs, strengthening couplers and journals, and employment of roller bearings (PX 26, T. 110-12). There also has been installation of heavier rail, elimination of untreated ties, employment of mechanized laying of rail and tamping of ballast, chemical control of vegetation on right-of-way, all to the end of achieving a much more stable and safe roadbed (PX 30). Sidings have been lengthened and new sidings have been constructed so that opposing trains may pass without the delay, and possible hazards, of a "saw-by" (T. 122-3). Improvements in yards have included vastly improved illumination to insure safety during the hours of darkness, and construction of electronic classification yards which eliminate the practice of crew members riding on moving cars to control them with hand brakes (PX 31). Improvement in signal equipment has included installation of automatic block signal and centralized traffic control, installation of radio equipment for communication between cabooses, engines and base stations, and adoption of safety devices such as hotbox detectors, dragging equipment detectors, broken flange and loose wheel detectors, slide detectors and high water detectors (PX 27). More effective braking systems have been adopted (PX 26). The interstate highway system has resulted in grade separations on the highways carrying the heaviest volume of traffic (T. 142), and the number of railway-highway grade crossings on Missouri Pacific in Arkansas has been reduced from 1,821 reflected in *Norwood* (13 F.Supp. 34) to 1,747 in 1966 (Interrogatory No. 80, PX 82). Automatic signal devices at grade crossings have been improved and installed to the extent that Missouri Pacific has 232 such devices in use in Arkansas compared to 95 in 1930 (PX 27, p. 25). The effect of the foregoing improvements has been to reduce greatly the hazards encountered by employees in freight and yard service, and to members of the public exposed to train operations. In the years 1924 through

1928, inclusive, Missouri Pacific Railroad Company transported an aggregate of 1,090,488,051 car miles in Arkansas during the course of which there were 727 road trainmen in freight service injured, and 603 yardmen injured. Due to the reduction of the hazards of the employment, during the years 1958 through 1962, inclusive, only 85 road trainmen in freight service and 92 yardmen were injured in Arkansas, during which period this Company transported 1,338,459,454 car miles in the state (T. 456-57).

Operating Methods and Duties of Trainmen.

Duties of trainmen have been greatly diminished by elimination of water stops that were necessary for steam locomotives. Water tanks were located every 15 to 20 miles along the right-of-way, and engineers seldom passed one without stopping to take water. Now, trains are operated great distances without stopping for fuel and water. For example, Missouri Pacific operates trains from Dupo, Illinois, to Texarkana, a distance of 491 miles, without stopping for fuel or water (T. 82-3). Many stations and spur tracks at which stops previously were made have been closed (T. 64). Handling of less than carload freight by road crews has been eliminated (T. 62-3). At, and prior to, the time of *Norwood* decision much of a freight crew's time was required to load and unload l. c. l. merchandise in freight cars, and handling and delivery of this freight is now done by other employees using trucks. Handling of l. c. l. freight obviously required more physical exertion than any of the present-day duties of trainmen. Merchandise weighing up to several thousand pounds was included in this category, and bales of cotton weighing 500 to 550 pounds were frequently carried in this area (T. 63). The testimony of intervenor's witnesses reveal an interesting aspect of handling such freight. It was frequent practice for one or more members of the train crew to load and unload

l. c. l. freight while the balance of the crew did station switching (PRX 19, p. 6; PRX 21, p. 9; PRX 23, p. 23-4). What better illustration could there be of recognition that even with steam locomotives less than the full six men on these crews were adequate to perform the switching.

Trainmen are no longer required to ride in the middle of trains (T. 130-1), nor on the tops of trains, and rules of Missouri Pacific prohibit riding on the top of a moving car (T. 126). Improved equipment heretofore referred to has greatly reduced "emergency" situations on the road requiring the performance of any work by train crews, and improved communication and mobile repair equipment has shifted the principal burden of that work from train crews to maintenance employees who are called to correct malfunctions on the road (T. 67-8). *Norwood* described hotboxes as the "most frequent" equipment malfunction creating emergency duties for train crews. 13 F.Supp. 33. As is reflected by that opinion, and also the testimony here, it was customary at that time for the train crew to "rebrass" hotboxes which was a job of considerable magnitude involving jacking-up the car and replacing the damaged brass element (T. 67-8). This is no longer done by train crews, and although one of intervenor's witnesses claimed in his testimony that one of a fireman's duties was to insure that the engine carried hot box repair equipment (IX 8, p. 3), he conceded on cross-examination that this testimony was "inadvertent" and that it had been at least twelve years since he helped rebrass a journal on the road (PRX 8, pp. 9-10). Reduction of hotboxes on Missouri Pacific has been such that in 1965 there occurred one hot box per 1,147,563 freight car miles compared to one hot box per 140,278 in 1931 (PX 82, Interrogatories Nos. 141 and 142).

The conductor no longer is required to spend more than a few minutes on record keeping functions on a

run (T. 99, PRX 27, p. 17), and the fireman no longer has any duties with regard to firing the locomotive or tending the boiler (PX 22, 23 and 24). The diminution of hazards incident to Missouri Pacific's operations resulting from the foregoing improvements has been sufficiently effective that in the years 1958 through 1962, train and yard service accidents in Arkansas produced injuries to all persons at an average rate of only .00045 per 100,000 car miles, and .02534 per 100,000 train miles, as compared to corresponding injury rates for the 1924 through 1928 period considered by the court in the *Norwood* case of .00276 per 100,000 car miles, and .07176 per 100,000 train miles (T. 456-7).

Expert Evaluations of Safe Crew Consists.

The record also contains a series of expert evaluations of these same technological and related changes and their cumulative effect on the crew size required for safe operations.

The most pertinent and persuasive of the relevant evaluations is perhaps the report of the Presidential Railroad Commission (PX 19). The Commission considered in great detail the changes in the firemen's job accompanying the transition to diesel power and concluded that firemen were not necessary for safe and efficient operations in freight and yard service. The Commission, consisting of five public members, five carrier representatives and five representatives of the labor organizations, held hearings during the period from February 1961 to November 1961, heard 36 witnesses for the carriers and 43 witnesses for the labor organizations and compiled a transcript consisting of 15,306 pages. In its report of February 1962 to the President of the United States, the Commission described in detail the claims which the organizations had made regarding the functions of firemen in diesel operations. It is apparent from the Commission's description of these

claims that it had before it precisely the same arguments on behalf of the firemen as the organizations have made in the present case. Moreover, the same witnesses who appeared before the Commission on behalf of the labor organizations were also their witnesses before the court below (PX 19, pp. 319-324). Every opportunity was available to the organizations to convince the Commission of the substance of their claims and every effort was made by the organizations to support their positions. The Commission's rejection of these claims after lengthy and protracted hearings, investigations and studies is thus of the most immediate and substantial significance in the present case. It is most compelling support of the finding of the District Court that firemen do not "perform significant safety functions in the operation and switching of freight trains and cars."

The Commission also made much the same evaluation with respect to third brakemen and third helpers. Commenting on the evidence before it, the Commission stated:

> "From the array of evidence, opinion, argument, and other information available to the Commission, including the observations made by the public members on their 'field' trips, we conclude (a) that there is *some* overmanning in road and yard service, under existing rules, regulations, and practices, but little undermanning; (b) that neither the amount of any overmanning or undermanning nor the precise circumstances in which they exist can be determined in this proceeding; and (c) that the extent of overmanning, while probably substantially less than estimated by the carriers, may nevertheless be a more significant problem for some railroads than for others. It appears that under present operating conditions the most typical and generally accepted crew consist, outside of passenger service, is a conductor (foreman) and 2 brakemen (helpers). An analysis of operations

so manned, as compared with any proposal for a change in the consist of any crew of different size, should be useful in judging the merits of any specific proposal" (p. 57).

It thus appears that the typical crew size on the American railroads, as well as the minimum crew size sought by the organizations (PX 19, p. 54) was less than the crew size required by the Arkansas statute. The Commission was convinced, however, that changes in railroad operations justified reductions in the size of such train crews. It described the relevant evidence as follows:

> "There is no doubt that certain technological, operational, and traffic changes have tended to reduce the actual workload of employees in some classes or kinds of service. Among such changes may be cited the virtual disappearance of l. c. l. (less-than-carload-lot) freight, the reduction in the amount of local switching, diminution of passenger service, reduction of the train crew's paper work, the virtual elimination of 'doubling hills' and of helper services, Centralized Traffic Control, the use of the radio-telephone, improvements leading to the detection and reduction of 'hot boxes', improvements in braking and signal systems, and modernization of classification yards" (p. 56).

It also noted that

> "[T]here are varying crew consists in road service on trains operated under similar conditions, as they pass from States having no 'full crew' laws into States having such laws. This is inferential evidence that the parties themselves consider that the difference in manpower requirements is not always warranted" (p. 56).

Comparable expert evaluations of the jobs which the lower court found to be unnecessary for safe operation were also made by Arbitration Board No. 282 and by the

many awards of Special Boards of Adjustment acting pursuant to the Award of Board No. 282. Arbitration Board No. 282 held, as had the Presidential Railroad Commission, that firemen were superfluous in freight and yard service. With respect to Special Boards created by Award of Arbitration Board No. 282, the data shows that a total of 7808 crews were reduced in size under these awards and that practically all of these crews were reduced to sizes smaller than the crew size required by the Arkansas statute (PX p. 78). Both Arbitration Board No. 282 and the Special Boards functioned under governing directives requiring them to give controlling weight to safety of operations in arriving at their determinations. Their expert evaluations are thus of immediate relevance in the present case. Other evaluations of the jobs of firemen and third helpers and brakemen, supporting the District Court findings, appear in the Report of Emergency Board No. 70, the Award of Arbitration Board No. 140, the Report of the Public Service Commission of the State of New York and the Report of the Royal Commission considering the employment of firemen on the Canadian Pacific Railway (PXs 110, 111, 112 and 113).

The District Court, while not regarding itself to be bound by the reports and findings of these expert bodies, gave evidentiary weight to them (274 F.Supp. 302). Certainly this approach was dictated by this Court's frequently announced deference to the expertise of such administrative and quasi-judicial bodies. *Whitney National Bank* v. *Bank of New Orleans & Tr. Co.*, 379 U.S. 411 (1965). It would, of course, be absurd to attempt any sort of comparison of the expertise of these boards and commissions on the safe manning level of railroad crews in contemporary railroad operations with that of the 1907 and 1913 Arkansas Legislatures.

In opposition to these highly persuasive evaluations, all, or virtually all, of the witnesses called by the Brotherhood

testified to the general effect that it was their opinion that a minimum crew of six men was required for safe railroad operations (IX 1-27, 29-35). Twenty-two of these witnesses were officers and members of the Brotherhood of Locomotive Firemen and Enginemen and their opinions were expressed in terms of the contribution of the fireman to the safety of operations. Twelve of these witnesses were officers or members of the Brotherhood of Railroad Trainmen,[1] and their opinion were directed toward the alleged need for a train crew consisting of a minimum of a conductor and three brakemen.

Authorities heretofore discussed admonish that this sort of opinion testimony has no probative value unless there are facts in the record to rationally sustain it, and that it does not make the legislative determination "fairly debatable" if the opinions are contrary to scientific principle or reason. The opinions expressed by these witnesses fall far short of passing muster under this sort of scrutiny.

That the real basis of the expressed opinions that six men were needed was that the additional men promoted speed of operations, not that they contributed to the safety of those operations, is evident from the testimony of the witnesses who testified on behalf of the intervenors (PRX 5, p. 6; PRX 8, pp. 5-6; PRX 11, pp. 16, 22-3; PRX 16, p. 32; PRX 33, p. 17; PRX 35, p. 11).

Moreover, the asserted need is related invariably to emergency situations which arise infrequently. The hotboxes mentioned have been so reduced that they now

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[1] In addition to these 34 officers and members of the B. L. F. & E. and the B. R. T., Mr. Wilkerson and Mr. Pelton who testified on behalf of intervenors at the trial were, respectively, a member and a former member of the B. L. F. & E. Mr. Pelton was the only member of the Brotherhood of Locomotive Engineers to testify, and it was apparent that he did not purport to represent that organization in appearing as a witness. He had never held an official position in the B. L. E. (T. 523-4).

occur only once in 14,946 freight train miles on the Missouri-Pacific (PX 82, Interrogatory No. 143). Thus if the average freight run were assumed to be 150 miles (although 100 miles is the "basic day" for pay purposes), an employee can expect to encounter a hotbox in only about one out of each 100 trains he operates. Concerning the "defective equipment" that could assertedly be corrected more expeditiously with a six man crew, Mr. German testified that delays in excess of five minutes due to such defects in diesel locomotives in 1965 averaged only about one a day on the entire system over which an average of 710 to 720 such locomotives were operating each day (T. 847-8). This is true notwithstanding the absence of the fireman from many of the trains in the other states in which Missouri Pacific operates, and the fact that in those states the typical crews are composed of four or five men. In fact, Mr. German testifies that there has been no discernible difference in the incidence of such delays since the process of removing firemen in the other states began (T. 848).

Weinberg v. *Northern Pacific*, supra, is responsive to the argument that additional men can be justified to handle infrequent emergency duties:

> "It would clearly be unreasonable and arbitrary to hold that this Diesel engine should carry one extra member of a crew at all times because of such possible emergencies which are shown to be infrequent, and to the exigencies of which neither management nor employees are shown to be lacking in the desire or ability to respond" (150 F. 2d at 652).

Many of the Brotherhood's witnesses stressed the need for six men in switching operations because curvature of the tracks and visual obstructions at certain points made it necessary to station men along the track to pass signals, or required that the signals be given from the fireman's side and relayed by him to the engineer. However,

as further evidence that it was speed, not safety, that prompted their opinions that six men were needed, these witnesses conceded that by reducing the number of cars handled on each movement at such locations, the operations could be performed by fewer men (PRX 23, pp. 28-30; PRX 2, p. 6; PRX 3, p. 8; PRX 5, pp. 24-5; PRX 23, pp. 28-30).

Many of these witnesses had worked on or observed railroad operations with crews of less than six men in other states, on trains operated by appellees which were within the exemptions of the Arkansas law or during the period the district court's injunction was in effect, or by the exempted railroads in Arkansas. Some of their testimony reflecting this experience and knowledge is at PRX 5, pp. 31-2; PRX 8, pp. 5-6; PRX 9, pp. 7-8; PRX 10, p. 10; PRX 13, pp. 12-3, 16-7; PRX 15, pp. 13-7; PRX 16, pp. 14-7; PRX 25, pp. 4-5, 7-8; PRX 29, pp. 5-6; PRX 31, pp. 14-5; PRX 33, pp. 21-2; and PRX 35, pp. 4-6. Notwithstanding this broad opportunity to know about any increased hazards incident to operations with smaller crews, if indeed there are any such increased hazards, not one of these witnesses was able to cite a single instance of an accident or injury attributable to the absence of additional men on these crews.

It is significant in assessing the credibility of the witnesses expressing the opinion that six men is the minimum safe crew that they have not in their collective conduct through the intervening organizations of which they are members manifested such an opinion. The dispute before the Presidential Railroad Commission involved, among other things the proposal of the intervenors here for a national rule or agreement providing for a minimum train crew of a *conductor and two helpers*, and a yard crew of a *foreman and two helpers* (PX 19, p. 54). This is one man less than these witnesses now are testifying is necessary *at a minimum* for safe railroad operations. The district cour

noted the significance of the Brotherhoods' proposals to the factual issues before it (274 F.Supp. 302).

Further, these intervenors have entered into collective bargaining agreements with railroads all over the country, including the appellees, that prescribe minimum crews of substantially less than six men (PX 78, pp. 14-7). They have made such agreements with the railroads in Arkansas that are exempted from one or both of the laws (PX 48, PX 49, PX 53, PX 54, PX 59, PX 64). With two or three exceptions, all of intervenors' witnesses are officers or former officers of these labor organizations and can certainly be presumed to know, and influence, their policies and activities, and it obviously taxed the District Court's credulity to hear them testify that six men are the minmum that can safely operate a train, and at the same time make proposals and agreements fixing smaller crews.

In contrast to the opinions of these witnesses for intervenors that are entirely without factual support in this record, there is the testimony of many witnesses, all with unquestioned expertise in railroad operations, who express the opinion that the maximum safety of railroad operations can be achieved with crews of four or less. These opinions differ from those of intervenors' witnesses not only in the conclusion expressed, but also differ qualitatively in that *there is ample factual support for them in this record.*

The district court heard Mr. Sheppard express his opinion pertaining to the safety of railroad operations conducted with crews of less than six men. Unlike the opinions expressed by intervenors' witnesses, this was not a speculation drawn out of thin air in conflict with the physical facts in evidence, nor a misconceived effort to equate speed with safety, nor a professed judgment contrary to that manifested by his conduct. The facts upon which he predicated his opinion were in evidence.

He had supervised and participated in train operations in other states for many years with crews of less than six, but had never known of an accident that could be attributed to the absence of an additional man on the crew (T. 151). He had supervised and participated in train operations in Arkansas and elsewhere during strikes using three, and four man crews of employees whose duties normally did not involve operation of trains, and even with such inexperienced personnel the operations were conducted without injuries attributable to the absence of additional crew members (T. 151-6).

Other opinion testimony introduced by appellees stands on a factual foundation similar to that which supports Mr. Sheppard's conclusions (PXs 1-14; PXs 33-41; PXs 75-76). The District Court, therefore, correctly concluded "from the overwhelming weight of the evidence" that safety of operations does not require six man crews.

C. The Evidence Fully Supports the District Court's Findings With Respect to the Burden Imposed on Interstate Commerce by the Arkansas Statutes.

Perhaps the best illustrations of the impairment of the free flow of interstate commerce resulting from these statutes are the absurd rituals they require near the Arkansas state line. Kansas City Southern Railway Company's trains operating between Pittsburg, Kansas and Watts, Oklahoma pass through portions of those states as well as Arkansas and Missouri on a 107 mile run. Only 28 miles of this run is in Arkansas, but the additional employees necessary to increase the crew to six ride the train between Watts and Noel, Missouri for a distance of 36 miles (PX 86, pp. 4-5).

Trains of the St. Louis-San Francisco Railway Company operating over the 174 mile run from Chaffee, Missouri to Memphis, Tennessee pick up, or drop off, an extra brakeman in Hayti, Missouri who rides for a distance of

93 miles between Hayti and Memphis solely to comply with the Arkansas law (PX 90, p. 11). Rock Island operates through freight trains from Memphis, Tennessee to Tucumcari, New Mexico, and a third brakeman is added for the segment between Memphis and Hartshorne, Oklahoma for the sole purpose of complying with the Arkansas statute (PX 25, p. 6). The record also shows the heavy volume of interstate through freight trains operated by Missouri Pacific and Cotton Belt between Dupo, Illinois and points in Texas, and between East St. Louis, Illinois to Corsicana, Texas, respectively, on which crew members are added or removed at or near the Arkansas border (PXs 1-14 and 32-41). These are only a few illustrations of the bizarre ceremonies that are observed daily near every point where the tracks of the plaintiffs cross the Arkansas boundary. It is the tribute exacted for the privilege of moving the nation's commerce through this state.

These strange practices, mandated by state statute and having no economic or logical justification, were described by Judge Rifkind, Chairman of the Presidential Railroad Commission in this language.[1]

> "In the train service, you find these extraordinary conditions. You find a train running along, and it is served by a conductor and two brakemen, which is in most cases the normal crew for trains. It comes to a State boundary and the train slows down, it doesn't quite stop, and another brakeman jumps aboard. He rides a short distance, maybe 20, 30, 40, 50 miles, until he comes to the other boundary of that State, at which point the train slows down and he gently drops to the side of the train. He hasn't done any work on that train. Why is he there? Because the legislation

[1] These observations were read to both the House and Senate committees considering legislation that became Public Law 88-108. Hearings before House Committee on Interstate and Foreign Commerce, p. 188. Hearings before Senate Committee on Commerce, p. 125.

of that State requires an extra brakeman for every train that passes through that State. It doesn't contribute to a man's self-respect to be assigned to that kind of a job."

Judge Rifkind's remarks preceded the Award of Board No. 282 permitting the removal of firemen. Thus the operation of the Arkansas laws produces a burden twice as heavy, and twice as indefensible, as the illustration he describes, because firemen as well as the "third brakeman" now participate in these state line rituals. For example, Missouri Pacific trains operating between Coffeeville, Kansas and Van Buren, Arkansas, are typically manned by a crew of four men between Coffeeville and Greenwood Junction, Oklahoma where *two* crew members are added for the balance of the journey which is *six miles* into Van Buren (PX 2; PX 6; PRX 13, pp. 9-11). This railroad must also pay the price of extra employees on the initial six miles on trains from Van Buren to Coffeeville for the privilege of getting the train out of Arkansas.

It must be remembered that the salary costs for the extra employees are not the only impositions of these laws on interstate commerce. The railroad business is competitive within itself, and with other forms of transportation, and the delay to train movements incident to picking up and letting off these employees near the state lines is not the minimal burden that it might first appear. Mr. Sheppard testified that these delays were of real significance to the railroads in their efforts to maintain their schedules, and that such stops resulted in delays of a minimum of ten minutes (T. 164-5). Mr. Pelton, an experienced engineer testifying for intervenors, testified that stopping and starting a train of 100 cars would result in a loss of 15 minutes running time (T. 484-5). Thus a through freight train crossing Arkansas is delayed a minimum of 20 to 30 minutes by its stops at or near the border when it enters and when it leaves the state. This loss of

running time, imposed as a penalty for moving an interstate train through Arkansas, may result in failure to arrive at interchange points in time to make expeditious and efficient use of a connecting carrier's schedules. A 20 minute delay to a train moving across Arkansas can result in hours of delay in the arrival of freight at its ultimate destination when it causes missed connections with other trains at points beyond Arkansas.

The absurdities resulting from the operation of the switch crew law are equally demonstrable. It not only requires that six men perform operations in Arkansas that are performed by three at places such as St. Louis and Kansas City (PX 31, p. 14), but also results in six man crews and four man crews doing the same work in the very same yards. This is the case in the Missouri Pacific yards at Texarkana which are bisected by the Arkansas-Texas state line. Some crews work only in the Texas sections of the yards and are manned by four men. Others work in the Arkansas as well as the Texas sections and have six men, and all do the same work (PX 31, pp. 10-1).

It is undeniable that these laws impose a substantial burden on interstate commerce. It is beyond dispute that the extent and scope of this burden is entirely out of proportion with that which existed when the earlier cases examining these laws were tried. The only rational conclusion to be drawn from the evidence is that the sole purpose and result of these statutes is to secure jobs, not safety. The Court is not required to be blind to history,[1]

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[1] See Lecht, *Experience Under Railway Legislation* (1955), pp. 93-94: "Trainmen and firemen assumed the lead in pushing full-crew bills because unemployment was particularly severe among their members."

Slichter, *Union Policies and Industrial Management* (1941), p. 187:

> "One of the most ambitious efforts to make work by requiring excessive crews, or the employment of unnecessary men, is

nor to that which is obvious in this litigation—that it is the make-work aspect of these laws that intervenors seek to preserve. The Brotherhoods frankly acknowledge this in the pleadings.[1]

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being made (with great success) by the train service unions on the railroads. These unions have been spurred to require the employment of unneeded men by the great drop in the employment of train service employees. The train service unions have used three principal methods to make work: (1) support of legislation, either requiring full crews or limiting the length of trains; (2) retaining obsolete rules which make work; and (3) enforcing the interpretations of rules so as to make work and to penalize the roads for using economical methods of operation."

Twenty years later, at about the time the national manning-level crisis began, the same author considered the situation unchanged:

> "Although there are an almost indefinite number of make-work methods, the following eleven varieties include most of the make-work practices: . . .
>
> *"Requirement of Excessive Crews.* The railroad crafts have made a few attempts to negotiate excessive crew requirements, but they have relied chiefly on legislation. They have sought two types of laws—full-crew laws and train limit laws."

(The authors proceed to explain that the latter laws have been declared unconstitutional, but that the manning-level legislation then remained in effect.) Slichter, Healty and Livernash, *The Impact of Collective Bargaining on Management* (1960), pp. 318, 322-23.

[1] Indeed, the motion to intervene makes it perfectly plain that the primary interests of the brotherhoods in this legislation lies in the economic benefits received by the brotherhoods and their membership from the existence of these laws. The first two recitals of the brotherhoods' interest in the lawsuits are:

> "The relief sought by the complaint would have a substantial and permanent damaging effect on the Unions in their capacity as agents and spokesmen for their members in that it would result in the loss of employment of large numbers of such members whose jobs are protected by the statutes being challenged.
>
> "The relief sought by the complaint would have a substantial and permanent damaging effect on the Unions in that it would result in a large loss of organizational membership and income because of the loss of employment of large numbers of their members whose jobs are protected by the statutes being challenged."

Cost of Compliance.

The evidence shows that the Arkansas statutes impose an annual cost burden on the appellee railroads, which would be eliminated in the absence of the statutory provisions, of approximately $7,600,000.00. For the individual railroads involved, the 1965 costs of maintaining the redundant firemen, brakemen and helpers required by the Arkansas statutes were as follows:

Missouri Pacific Railroad	—$3,525,174.00	(PX 85, p. 4)
St. Louis Southwestern Ry.	—$2,198,954.00	(PX 43, p. 4)
Chicago, Rock Island and Pacific Railroad	—$ 801,425.00	(PX 88, p. 5)
St. Louis-San Francisco Ry. Co.	—$ 702,684.00	(PX 81, p. 8)
Kansas Ctiy Southern Ry. Co.	—$ 389,603.00	(Exhibit D to PX 86)

The costs thus incurred in 1965 understate the amount of the present burden. Since 1965, there have been increases in rates of pay which would automatically increase the wage costs attributable to the unnecessary employees required by the Arkansas statutes (T. 440-441).

Reference has already been made to the astronomical increase in the cost to the railroads of complying with these statutes since the earlier litigation. A realistic illustration of this is supplied by the figures pertaining to the Missouri Pacific Railroad Company contained in the *Norwood* record and the current operating figures of that railroad.

In 1929, the most recent year for which this information was considered in *Norwood*, the cost of compliance with

these two laws to Missouri Pacific was $481,866 (13 F. Supp. 34). This represented 3.94% of the Company's net income for that year (PX 85, p. 5). The cost of compliance for the year 1965 was $3,523,174, representing 26.25% of the Company's net income for that year (PX 85, p. 5). Thus the absolute cost has increased (largely as a result of wage increases and the requirement of a fireman who is unnecessary now but was needed at the time of *Norwood)* by over 600%. At the same time, while considerably less than 25% of Missouri Pacific's operations are in Arkansas (PX 67, p. 44), compliance with these statutes in this state requires expenditure of over 25% of its net earnings derived from operations in its entire 11 state system.

Viewed either relatively or absolutely, this cost has become so much more burdensome since *Norwood* that while that court thought that "it is not clear that the additional expenses of these" extra employees were sufficiently great to render the statutes unreasonable and arbitrary (13 F.Supp. 35), the burden is now demonstrably unreasonable.

It is again noted that *Norwood* did not measure the validity of these statutes against the limitations of the Commerce clause. The present cost of compliance clearly demonstrates that these laws are no longer the "minimal burden" on interstate commerce that it was said in *Southern Pacific Co.* in 1945 that this Court had considered them in the earlier cases. It is submitted that the burden they now lay on interstate commerce, and on interstate commerce alone, is so much greater than that imposed by the statutes held invalid in *Southern Pacific Co.* in 1945 and in *Morgan* v. *Virginia* in 1946 that the Arkansas laws are clearly repugnant to the Commerce Clause under the rule of those decisions.

• • • • • • •

This extended discussion of the details of the evidence is necessary because the District Court's decision was essentially a factual one. This Court's mandate remanding the case for trial made it clear that the principal issue to be resolved was whether the railroads could prove the factual allegations of their complaint. The District Court concluded that while that burden of proof was a heavy one indeed, the railroads met it at the trial. It is submitted that the record abundantly supports that finding of the District Court and that plenary review by this Court is not warranted.

III. DECISIONS BY OTHER COURTS INVOLVING CREW CONSIST STATUTES DO NOT WARRANT PLENARY REVIEW OF THE DISTRICT COURT'S DECISION IN THE PRESENT CASE.

Appellants suggest that the decision of the District Court is "in flat conflict with the result and rationale of controlling cases in other jurisdictions" and that this Court should resolve the conflict (J. S., p. 12). Appropriate analysis of the relevant decided cases, however, demonstrate that the decision of the District Court is in accord with the majority view and is indisputably correct.

One of the earliest cases involving crew requirements was *Sullivan* v. *Shreveport*, 251 U.S. 169 (1919), where a city ordinance requiring both a conductor and a motorman on each street car operated within the city was upheld against attack on 14th Amendment grounds. The Court weighed testimony concerning street car operations and concluded that the statute as applied was not clearly arbitrary.

The ordinance was again attacked on the same grounds in *Shreveport Rys. Co.* v. *City of Shreveport*, 37 F. 2d 910 (1930). The District Court referred the case to a Master who heard testimony for several weeks, and concluded that conditions affecting the safety of "one-man street

cars'' were substantially changed since the prior case and that the ordinance had become unconstitutional in its operation. The opinion contains an extensive review of comparative conditions demonstrating the changes between 1917 (apparently the date of trial in the prior case) and 1929, the date of the hearing before the Master in this case. Therefore, the changes occurring in the course of twelve years were determinative as compared to the changes occurring in the course of over thirty-five years since the second trial of *Norwood.* The court held that the ordinance requiring two men on street cars ''in light of the proven experience of other cities, is arbitrary, and amounts to taking of plaintiff's property without due process of law, results in confiscation * * *'' and enjoined the enforcement of the ordinance.

The case was affirmed in *City of Shreveport* v. *Shreveport Ry. Co.,* 38 F. 2d 945 (5 Cir., 1930), the appellate court pointing out that the prior decision of this Court ''did not go further than to hold that the ordinance was valid as applied to conditions existing at the time suit was filed in 1917.'' Certiorari was denied. 281 U.S. 763 (1930). Other cases of historical pertinence are *Georgia Power Co.* v. *Borough of Atlanta,* 52 F. 2d 303 (1931) and *San Francisco* v. *Market St. Ry. Co.,* 98 F. 2d 628 (9 Cir., 1938). In the former a preliminary injunction was issued against the enforcement of an ordinance requiring two-man crews on street cars, and in the latter the validity of such an ordinance was sustained on the ground that the unique circumstances in which it was applied demonstrated its reasonableness. The facts upon which the court relied to distinguish the decisions from other jurisdictions were that San Francisco had the steepest grades in the United States in its streets, heavy fogs during both summer and winter, unusual angles of intersection of the streets, and unusual concentration of pedestrian and vehicular traffic due to geographic features.

The crew consist law of Pennsylvania was challenged as violating both federal and state constitutional due process provisions because they were unreasonable, arbitrary and not in furtherance of their stated purpose of safety, and also on the ground of imposition of an undue burden on interstate commerce in *Pennsylvania R. Co.* v. *Driscoll*, 198 A. 130 (Pa., 1938). The Supreme Court of Pennsylvania sustained the trial court's action of continuing a preliminary injunction against enforcement of the Act, and remanded the case for the taking of testimony concerning the effect of the minimum crew requirements with respect to the burden of compliance by the railroad as balanced against the benefits, if any, of greater safety. The Court recognized the *Norwood* decision to be relevant, but concluded that it did not impair the right to prosecute a constitutional attack on crew consist laws.

On remand, the case was fully developed before the Chancellor during the course of four months required for the taking of testimony alone. The opinion of the Chancellor holding the disputed sections of the Act to be unconstitutional was adopted by the Supreme Court of Pennsylvania on review and is reported along with that Court's own opinion in *Pennsylvania R. Co.* v. *Driscoll*, 9 A. 2d 621 (Pa., 1939). The Chancellor held the minimum crew requirements to be invalid as in contravention of the due process clauses of both the state and federal constitutions and of the commerce clause of the federal constitution. The Supreme Court rested its decision upon violation of the state constitution's due process requirements, feeling that because of the result it was unnecessary to reach the federal constitutional questions.

In defining the term "safety" as it was relevant to its inquiry into the validity of the Pennsylvania crew consist laws, the court said (198 Atl. 134-5):

> "* * * Whether the measure promotes safety, or has a tendency to do so, must indubitably turn on

facts and circumstances regarding that subject, and the relation which the provisions of the Act bear to safety. An analysis of the statute and the statute's requirements is necessary; we must compare these with the incidents of transportation, including the causes which create the need for safe-guards, and the methods now employed to obtain the safety of the public and employees. When the result is reached, *if it is found the statutory protection is of such slight consequence, or is so incidental as to cause the provisions of the Act to be wholly impractical, and not in promotion of the safety it seems to strive for, then its operation would be unreasonable and arbitrary.*

" ' * * * *Safety is a relative term. Absolute safety can never be insured,* and comparative safety is attended by certain necessary elements of disadvantage which must enter the comparison. One of these elements is cost, and it must be considered.

" 'Cost reflects not only the expense of compliance in dollars and cents to the railroad but more important, bears on the ultimate expense to the public at large which uses its facilities. The cost of complying with state laws enacted to promote safety is an important element in determining whether the law is arbitrary and unreasonable. * * * Appellee's evidence shows that it will cost the railroad about $4,500,000 annually to carry out the provisions of this Act in the State. *It is urged, not without merit, that the speculative advantage to safety through the introduction of additional human agencies is so highly problematical and uncertain,* that the expenditure of this sum each year for that purpose out of the net annual income for the Pennsylvania region is unreasonable and arbitrary.' " (Emphasis supplied.)

The views of the *Driscoll* court that slight and problematical contributions to safety were insufficient to have a

statute imposing a substantial regulatory burden on private interests were fully vindicated seven years later in *Southern Pacific Company* v. *Arizona*, supra, where this Court said that the "decisive question" in measuring the validity of a purported safety statute was whether its effect as a safety measure "is so slight and problematical as not to outweigh" the constitutional rights upon which its burden falls.

Weinberg et al. v. *Northern Pac. Ry. Co.* (8 Cir., 1945), 150 F.2d 645, was a suit for injunction against city officials to restrain enforcement of an ordinance of Duluth, Minn., requiring two men in a locomotive operated in the City. The attack was limited to application of the ordinance to a particular 44-ton Diesel electric engine used as a yard engine by plaintiff, and the permanent injunction entered by trial court was sustained on appeal. The ordinance recited its purpose in this familiar language: "That to promote the safety and welfare of employees operating locomotives * * * and to protect and promote public safety * * *". The trial court reviewed extensively the operating practices with regard to this particular locomotive and concluded that "the employment of a fireman or helper thereon would be mere surplusage, and the contribution to the safety of operation by his addition would be negligible." The Court of Appeals, after reviewing the record, added:

> "In view of all these facts the question of any safety arising by the presence of an additional man in the engine is purely imaginary and speculative."

The Court recognized that if the ordinance can be justified it, like the Arkansas Acts, must be on the theory that it is a reasonable exercise of the police power. However, it pointed out the traditional limitation on the police power as follows:

> "The City Council, however, may not under the guise of protecting the public interest, arbitrarily in-

terfere with the operation of the common carrier or impose unreasonable restrictions upon its lawful calling. To justify the legislation it must appear that the interests of the public, generally, as distinguished from those of a particular class, require such interference, and even when this condition may be said to exist, the means to accomplish the purpose must be reasonably necessary and not oppressive, not arbitrary." (Citing cases.)

The Court of Appeals pointed out that both it and the district court were mindful that if the reasonableness of a statute is "fairly debatable", then the courts would not interfere with the legislative determination (p. 648). It then held, in language of particular significance here, that conflicting opinions of the witnesses concerning safety of railroad operations did not make the issue "debatable" in this context. At page 651 the court said:

"It is said there was some conflict in the evidence and hence the question presented to the trial court was a debatable one, and the court should have denied relief. Certain witnesses testified, giving their opinions as to the danger of operating the one-man Diesel without a second man at all times in the engine. But opinions not supported by facts, and which are contrary to the physical facts and do violence to scientific principle or reason, are robbed of all probative value. It may well be doubted whether this question was one subject to expert testimony. Spokane & I. E. R. Co. v. United States, 241 U. S. 344, 36 S. Ct. 668, 60 L. Ed. 1037; Missouri, K. & T. Ry. Co. v. Grimes, Tex. Civ. App., 196 S. W. 691; Cleveland, C., C. & St. L. Ry. Co. v. De Bolt, 10 Ind. App. 174, 37 N. E. 737."

In language squarely applicable to the testimony of several of intervenors' witnesses in the case at bar that it was their opinion that it was unsafe to operate trains in

Arkansas with crews of less than six men, the court continues at page 652:

> "It is not enough to sustain this ordinance that some witness may have given it as his opinion that it was unsafe to operate this engine without it being manned with two men in the cab. If that were sufficient, no question could be imagined that could not be made debatable. But the test is that it must be fairly debatable; in other words, it must be reasonably debatable or justly debatable. Certainly these opinions must bear the test as to whether facts in the record rationally sustain them, and we think the facts do not sustain them. Without this opinion evidence there is not a scintilla of evidence in the record to sustain the legislation."

The district court had concluded that the contribution of an extra crew member to safety would be "negligible", and the court of appeals found that such contribution would be "purely imaginary and speculative." Thus the absence of a genuine and significant relationship between the purpose of the regulation and what it produced in its practical operation required holding it invalid under the Due Process Clause, just as the *Driscoll* court had done when it found a crew consist law's contributions to safety to be of "slight consequence" and "highly problematical and uncertain", and as the *Southern Pac. Co.* court had done under the Commerce Clause upon finding a train length law's effect as a safety measure to be "slight and problematical."

Since *Driscoll* in 1939 and *Weinberg* in 1945 held that railroad crew consist laws requiring excessive crews could not pass muster when tested in terms of due process, and *Southern Pac. Co.* and *Morgan* strongly suggested in 1945 and 1946 the same result if validity was measured against the limitations of the Commerce Clause, there only have been two appellate court decisions dealing with such laws

that are out of step with the teachings of those decisions. In sustaining the Indiana crew consist laws in a summary proceeding, *without a trial on the merits,* the Indiana court simply ignored those decisions. *Public Service Commission of Indiana et al.* v. *The New York Central Railroad Co. et al.* (Ind., 1966), 216 N. E. 2d 716. The other appellate court decision was *New York Cent. RR* v. *Lefkowitz,* 282 N. Y. S. 2d 68 (App. Div. 1967) affirming without opinion the decision of a New York trial court judge hereinafter discussed.

In Indiana the plaintiff railroads brought action to enjoin enforcement of these laws, and filed affidavits and exhibits in support of their motion for a temporary injunction. Counter affidavits were filed, and after a one-day hearing the trial judge granted the temporary injunction. The Supreme Court of Indiana reversed, concluding that the statutes were constitutional, *and directed that final judgment be entered against plaintiffs* by the trial court. One Justice, concurring, expressed the view that plaintiffs were entitled to have a trial of their case on the merits.

To support its conclusion that the laws were constitutional, the Indiana court relied on three considerations: (1) That a similar statute passed in 1907 had been sustained by it in 1909 and by this Court in 1911. (The action of this Court is reflected by a *per curiam* order of affirmance citing its first decision dealing with the 1907 Arkansas statute. *Pittsburgh, Cincinnati, Chicago & St. L. Ry. Co.* v. *State,* 223 U.S. 713 (1911); (2) That in 1963 an Indiana circuit judge had sustained a demurrer in another action questioning the validity of these laws; and (3) That a presumption of constitutionality supports legislation until it is declared invalid by the courts. The court considered the technological advances made by the railroads to be irrelevant to its determination, observing that such advances were made for the purpose of meeting competition and:

> "In any event the alleged improvements in technology and operating changes cannot be used to justify a reduction in appellees work force. Such relief, if justified, is properly found in the legislature and not the courts."

It is respectfully suggested that the Indiana court could not have read *Norwood, Driscoll, Weinberg,* or Justice Black's decision in the earlier appeal of the case at bar, and rationally reached such a spurious conclusion.

The Indiana railroads petitioned for certiorari. Because the limited record consisting of affidavits and exhibits presented in connection with the motion for a temporary injunction did not afford an adequate body of proof to permit a court to pass on the factual issues in the case (there having been no trial, no testimony and no opportunity for cross-examination), the narrow question presented to the Supreme Court was:

> "Whether a state appellate court can, consistent with the due process requirements of the Fourteenth Amendment, deny a trial of federal constitutional issues turning on factual presentations by directing the entry of final judgment in the course of an interlocutory review of a temporary injunction."

On the narrow question so presented, certiorari was denied. *The New York Central R. Co.* v. *Public Service Commission of Indiana,* 17 L. Ed. 2d 76 (1966).

The Indiana decision is demonstrably wrong and doesn't even reach the basic issues that this Court in the case at bar remanded to the district court for resolution, i. e., whether changed circumstances have made crew consist laws unconstitutional in their present application.

In *Chicago & North Western R. Co.* v. *LaFollette,* 135 N. W. 2d 269 (Wisc. 1965), the railroads of Wisconsin challenged its statutes requiring only five men in freight

and yard service crews on grounds essentially the same as those presented in the case at bar, but with the emphasis on the requirement of a fireman in these crews. The circuit court overruled demurrers filed by defendants, and on appeal the Supreme Court agreed that the facts alleged entitled the railroads to a trial on the question of the validity of the statutes as applied to modern railroad operations, saying:

> "We conclude that the complaint does state sufficient facts to entitle the respondents to a trial as to the constitutionality of the challenged portions of the 'full crew' statutes" (p. 283).

and

> "The challenge raised by the respondents is of sufficient magnitude to warrant a judicial inquiry. Certainly, the studies made by the boards on the railroad issues, raise sufficient doubt about the entire subject of full crew legislation" (p. 280).

The court considered *Norwood* as offering no obstacle to its examination into the validity of the statutes, observing that *Norwood* antedates the "age of dieselization" of which it took judicial notice (p. 282). Neither did it regard *The New York Cent. R. Co.* v. *Lefkowitz,* decided only a short time earlier, to be entitled to such weight as to preclude "our own independent evaluation of conditions as they exist today in Wisconsin" (p. 282). To the contrary the Wisconsin court found *Driscoll* to be the most impressive precedent in this field. At page 282 it states:

> "We think the reasoning in Pennsylvania Railroad Co. v. Driscoll (1938), 330 Pa. 97, 198 A. 130, is most appropriate to this case."

It then quotes with approval this language from *Driscoll:*

> "* * * but this challenge against the constitutionality of the Full Crew Act depends entirely on facts. We

cannot determine whether the Act is confiscatory, unreasonable and arbitrary, or whether it does not reasonably tend to promote safety, until facts are presented to show the existence of any of these effects. Prima facie, the Act is valid and must be so considered by us until its invalidity appears. Whether the measure promotes safety, or has a tendency to do so must indubitably turn on facts and circumstances regarding that subject, and the relation which the provisions of the Act bear to safety. An analysis of the statute and the statute's requirements is necessary; we must compare these with the incidents of transportation, including the causes which create the need for safeguards, and the methods now employed to obtain the safety of the public and employees. When the result is reached, if it is found the statutory protection is of such slight consequence, or is so incidental as to cause the provisions of the Act to be wholly impractical, and not in promotion of the safety it seems to strive for, then its operation would be unreasonable by evidence. In these circumstances, of course, it would be error to refuse to hear evidence (Cases cited)."

* * * * * * * * *

"* * * What impressed us most was the highly speculative possibility of the danger of accidents alleged to exist. The resultant effectiveness of the Act under these circumstances could only be out of all reasonable proportion to the cost involved, * * *."

On remand, after a forty-two day trial, the circuit judge held the statutory requirement of a fireman on light engines (those without cars) and in switching operations unconstitutional, but sustained the requirement of a fireman on way and through freight operations. The basis for the holding of invalidity was the court's finding that those statutory requirements bear no reasonable re-

lationship to the safety of railroad operations. The basis for sustaining certain of the requirements was its finding that in those particular operations the fireman performed functions that could be characterized as "useful and necessary" to safety. Regarding these latter sections, the court observed:

> "The present laws are too sweeping and rigidly inflexible. They are essentially job statutes rather than safety measures as was originally intended."

Of course, the Wisconsin court was passing on the validity of a five-man crew requirement, and his holding was that it was valid in some operations and required an unconstitutionally excessive number of employees in others. The Arkansas statutes involved here require crews of six men in all operations they regulate.

The unreported opinion of the circuit court of Dane County, Wisconsin was published on September 7, 1967.

At the trial court level, there have been three other relatively recent decisions in state courts in this area. Two of these trial judges sustained the crew consist laws of their respective states. *New York Central R. Co.* v. *Lefkowitz,* 46 Misc. 2d 68, 259 N. Y. S. 2d 76 (1965), and *Akron, Canton & Youngstown R. Co.* v. *Public U. Comm.,* 9 Ohio Misc. 183, 224 N. E. 2d 169 (1967). The third judge held that the legislature could not have intended that the Nebraska crew consist law apply to trains powered by diesel locomotives because the proof showed that there were no essential duties for him to perform that could not be discharged by other members of the crew. *State of Nebraska* v. *Thurston,* District Court of Jefferson County, Nebraska, unreported Memorandum published January 19, 1965.

The New York trial judge filed an extensive opinion. He recognized the relevance of the technological advances in the railroad industry, saying:

> "It (the record) does show, however, an impressive record of improvement in technology, which has tended to decrease substantially the hazards of railroad operation, to railroad employees and the public, and lends considerable force to plaintiffs' argument that in light of present conditions the full crew laws are obsolete and have no reasonable relation to the safety of railroad operations."

He acknowledged that the inflexibility of these laws was unjustified:

> "It must be conceded that the criticism leveled against the full crew laws is not without merit. They are mandatory and inflexible and make no distinction between differences which exist in the operation of different railroads, or in different types of operation on the same railroads. They may, as plaintiffs contend, exact needless and wasteful requirements in some cases, and it may be that some assignments may be as safely and efficiently handled with fewer employees than the laws require."

However, he concludes that the proof does not show the requirements of the extra employees are so unreasonable as to warrant him in holding them to be in violation of due process. Judge Nolan states that he considered the findings, including factual conclusions, reached by the Presidential Railroad Commission, the New York Public Service Commission, and the Canadian Royal Commission (PX 19, PX 112 and PX 113 in case at bar) but concluded that these Commissions did not "determine the precise question before the court in this action." This reveals the basic flaw in his reasoning that permeates the entire decision. Those Commissions found the extra employees unnecessary to the safe conduct of railroad operations, and that any duties they performed that were essential to safety could be performed adequately by other crew mem-

bers. Judge Nolan seems to agree as evidenced by his unwillingness to hold the statute unconstitutional with respect to its requirement for a fireman even if it is assumed that "the head brakeman is in all respects as competent as the fireman to perform and does adequately perform the duties assigned to both which are necessary in the interest of safety."

His reasoning is that although it is true that the statutes require more employees than are necessary to perform the work safely, since the extra employees do perform some work or service the statutes are not so unreasonable in their operation as to warrant his declaring them to violate due process. This simply accords to this legislation a greater degree of tolerance to unreasonableness than the authoritative decisions warrant. It is clear that even the *Norwood* court would have invalidated the statutes if it had found that less men could have performed the work as safely as the six man crew. In order to sustain the laws that court deemed it necessary to find, and did find, that the extra man they required "* * * still adds a material element of safety to employees and the public."

Of course, Judge Nolan's conclusion is in square conflict with reasoning of *Driscoll* and *Weinberg*, and he makes no effort to distinguish those decisions. As earlier noted, his decision was affirmed by the Appellate Division without opinion, and is now pending on appeal to the New York Court of Appeals.

The two other trial court decisions warrant only brief comment. In *Akron, Canton & Youngstown R. Co.* v. *Public U. Comm.*, 9 Ohio Misc. 183, 224 N. E. 2d 169 (1967), the judge of the Court of Common Pleas of Frainklin County, Ohio sustained crew consist statutes of that state requiring five men on some train operations and four on others. The decision is pending on appeal and is of little

value in measuring the constitutional validity of the Arkansas laws requiring six-man crews.

In *State of Nebraska* v. *Thurston*, District Court of Jefferson County, unreported memorandum published January 19, 1965, the state trial court judge was also dealing with a statutory requirement of only a five-man crew. Therefore, the controversy was in terms of whether the statute required a fireman on a diesel locomotive. The court found that a fireman was not necessary to the safe operation of a diesel locomotive, and concluded that the Legislature could not have intended to apply the statute to trains powered by such locomotives.

The foregoing are all of the decisions dealing with crew consist laws that would appear to have any relevance to the issues in the case at bar. Appellees submit that the articulate reasoning in *Driscoll, Weinberg,* and the District Court in the case at bar, clearly establish these decisions as the leading ones in this area subsequent to, and consistent with, *Norwood.* They are also entirely in accord with the controlling precedents of this Court. Accordingly, the judgment of the District Court should be affirmed without argument.

Respectfully submitted,

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